

Acthar® Gel (repository corticotropin injection) Reference Bibliography

This bibliography contains verifiable peer-reviewed manuscripts and abstracts on the use of Acthar Gel, as well as publications supported by Mallinckrodt that relate to Acthar directly or indirectly. Human and preclinical studies, health economic and outcomes analyses (HEOR), reports and reviews are included and, where available, links to PubMed are provided.

Updated: November 2021

Nephrology

1. Aala A, Yalcindag A, Faizan MK. Successful treatment of resistant mixed class IV/V SLE with adrenocorticotrophic hormone (ACTH) [ASN abstract TH-PO021]. *J Am Soc Nephrol*. 2016;27(suppl):99A.
2. Alhamad T, Dieck J, Vujjini V, Kanawati B, Brennan D, Alachkar N. Acthar in recurrent focal segmental glomerular sclerosis after kidney transplantation [ATC abstract B150]. *Am J Transplant*. 2017;17(suppl 3):561-562.
3. Alhamad T, Dieck JM, Younus U, Matar D, Alasfar S, Vujjini V, Wall D, Kanawati B, Jochen R, Brennan DC, Alachkar N. ACTH Gel in resistant focal segmental glomerulosclerosis after kidney transplantation. *Transplantation*. 2019;103(1):202-209. [Link](#)
4. Anwar S, Larson DS, Naimi N, et al. A case report of adrenocorticotrophic hormone to treat recurrent focal segmental glomerular sclerosis post-transplantation and biomarker monitoring. *Front Med (Lausanne)*. 2015;2:13. [Link](#)
5. Agrawal S, Gensure R, Milner L, Nicoletta J, Sadeghi-Nejad A. Central precocious puberty as a complication of therapy with adrenocorticotropin (ACTH) and an aromatase inhibitor for refractory nephrotic syndrome. *Case in pediatrics*. 2019;2019:1624274
6. Arif H, Ellie K, Monalisa J. "Repository ACTH". Novel therapy in treatment of resistant nephrotic syndrome [NKF abstract 23]. *Am J Kidney Dis*. 2013;61(4):A21.
7. Barney EJ, McCann E, Sarani S, Huang CS, Pham PC. Successful use of ACTHAR in patient with nephrotic syndrome and oral steroid intolerance [ASN abstract PUB431]. *J Am Soc Nephrol*. 2013;24(suppl):969A.
8. Beck LH, Fervenza FC, Bomback AS, et al. Treatment of membranous nephropathy with adrenocorticotrophic hormone (ACTH) gel: Correlation of anti-PLA2R and disease activity [ERA-EDTA abstract SAP294]. *Nephrol Dial Transplant*. 2012;27(suppl 2):ii416-ii417
9. Berg AL. Plasma cortisol levels after natural ACTH 1-39 and syntetic ACTH 1-24 in humans [NKF abstract 39]. *Am J Kidney Dis*. 2013;61(4):A25
10. Bomback AS, Tumlin JA, Baranski J, et al. Treatment of nephrotic syndrome with adrenocorticotrophic hormone (ACTH) gel. *Drug Des Devel Ther*. 2011;5:147-153. [Link](#)
11. Bomback AS, Canetta PA, Beck LH, Ayalon R, Radhakrishnan J, Appel GB. Treatment of resistant glomerular diseases with adrenocorticotrophic hormone gel: A prospective trial. *American Journal of Nephrology*. 2012;36(1):58-67. [Link](#)
12. Bonilla MA, Parada XF, Henriquez MA. A case series on the treatment of nephrotic syndrome with natural adrenocorticotrophic hormone gel in an office setting [ASN abstract PUB219]. *J Am Soc Nephrol*. 2015;26(suppl):937A.
13. Chinnadurai A, Goodwin J. Adrenocorticotrophic hormone (ACTH) in the treatment of refractory childhood nephrotic syndrome (NS) [ASN abstract TH-PO530]. *J Am Soc Nephrol*. 2018;29(suppl):255-256.
14. Delville M, Canaud G, Legendre C. FSGS ACTH gel: part of the answer? *Transplantation*. 2019;103(1):15-16. [Link](#)
15. El-Husseini A, Saxon D, Jennings S, Cornea V, Beck L, Sawaya BP. Idiopathic membranous nephropathy: Diagnostic and therapeutic challenges. *Am J Nephrol*. 2016;43(2):65-70. [Link](#)
16. Faizan MK, Ruchir SP. Successful remission of treatment-resistant minimal change disease with adrenocorticotrophic hormone gel [ASN abstract PUB135]. *J Am Soc Nephrol*. 2013;24(suppl):905A-906A
17. Faizan MK, McCracken C, Lieberman K, Leong T, Benfield MR. Practice patterns and outcomes of repository corticotropin injection (Acthar® Gel) use in childhood nephrotic

- syndrome: A study of the North American Pediatric Renal Trials and collaborative studies and the Pediatric Nephrology Research Consortium. *J Clin Nephrol.* 2021;5:67-76.
18. Filippone EJ, Dopson SJ, Rivers DM, Monk RD, Udani SM, Jafari G, Huang SC, Melhem A, Assioun B, Schmitz PG. Adrenocorticotrophic hormone analog use for podocytopathies. *Int Med Case Rep J.* 2016;9:125-133. [Link](#)
 19. Gaurav K, Gera M. Experience with Acthar for treatment of nephrotic range proteinuria of different etiologies. A case series [NKF abstract 103]. *Am J Kidney Dis.* 2013;61(4):A41.
 20. Groves AP, Reich P, Sigdel B, Davis TK. Pneumococcal hemolytic uremic syndrome and steroid resistant nephrotic syndrome. *Clin Kidney J.* 2016;9(4):572-575. [Link](#)
 21. Giuffre S, Wetzel J, Guy R, Pohle-Krauza R, Sarac E. Safety and efficacy of Acthar Gel in an outpatient dialysis population. [CSM abstract] *Cardiopulm Phys Ther J.* 2018;29(1):37-59.
 22. Hanna R, Selamet U, Wallace D, Shieh, Rastogi A, Haghgi NN. Membranous nephropathy secondary to myasthenia gravis treated with adrenocorticotrophic hormone. [NKF abstract 113]. *Am J Kidney Dis.* 2018;71(4):543.
 23. Hartzell S, Sanchez-Russo L, Pecchio IP, Okoroafor I, Meliambro K, Bin S, Fribourg M, Cantarelli C, Campbell KN, Cravedi P. Repository Corticotropin Injections promote clinical remission and regulatory T Cell expansion in membranous nephropathy. *Kidney Int Rep.* 2021;6(9):2491-2495. [Link](#)
 24. Grafals M, Sharfuddin A. Adrenocorticotrophic hormone in the treatment of focal segmental glomerulosclerosis following kidney transplantation. *Transplant Proc.* 2019;51(6):1831-1837. [Link](#)
 25. Hanna RM, Arman F, Selamet U, Wallace WD, Barsoum M, Rastogi A, Nobakht N, Shieh P. Secondary membranous nephropathy in a patient with myasthenia gravis without thymic disease, and partial remission induced by adrenocorticotrophic hormone therapy. *SAGE Open Med Case Rep.* 2019; [published online: August 8, 2019] [Link](#)
 26. Hasan A, Kopyt NP. Acthar® (ACTH) therapy in post-transplant de novo IgA nephropathy (IgAN) [ASN abstract PUB508]. *J Am Soc Nephrol.* 2017;28(suppl):1094.
 27. Hennigar RA, Klein CL. Nephrotic syndrome post-kidney transplant. *Clin J Am Soc Nephrol.* 2017;12(8):1347-1350. [Link](#)
 28. Hladunewich MA, Cattran D, Beck LH, et al. A pilot study to determine the dose and effectiveness of adrenocorticotrophic hormone (H.P. Acthar Gel) in nephrotic syndrome due to idiopathic membranous nephropathy. *Nephrology.* 2014;29(8):1570-1577. [Link](#)
 29. Hogan J, Bomback AS, Mehta K, et al. Treatment of idiopathic FSGS with adrenocorticotrophic hormone gel. *Clin J Am Soc Nephrol.* 2013;8(12):2072-2081. [Link](#)
 30. Huang S., Pham P.C. Adrenocorticotrophic hormone gel and collapsing variant focal segmental glomerulosclerosis [NKF abstract 115]. *Am J Kidney Dis.* 2015;65(4):A43.
 31. Khalil A, Karabala A, Sharfuddin A, Grafals M. Treatment of post-transplant nephrotic syndrome with adrenocorticotrophic (ACTH) gel [ATC abstract B163]. *Am J Transplant.* 2017;17(suppl 3):566.
 32. Khastgir A, Teehan GS. Maintenance of proteinuria treatment response to H.P. Acthar Gel® in patients with nephrotic syndrome: A follow-up case series [ASN abstract PUB212] *J Am Soc Nephrol.* 2015;26:936A. [Link](#)
 33. Khastgir A, Mijovic-Das S. H.P. Acthar® Gel in patients with IGA nephropathy, membranous lupus nephritis and minimal change disease: A retrospective case series [NKF abstract SCM15]. *Am J Kidney Dis.* 2015;65(4):A49
 34. Khastgir A, Madan A. Response to H.P. Acthar gel in patients with nephrotic syndrome maintenance of proteinuria reduction and renal function. [NKF abstract 160]. *Am J Kidney Dis.* 2018;71(4):555.
 35. Kittanamongkolchai W, Cheungpasitporn W, Zand L. Safety of ACTH treatment in glomerular diseases: A meta-analysis [Adv Kidney Dis abstract 2]. *Blood Purif.* 2016;41(1-3):225-226.
 36. Koppula S, Amy NS, Barry RG. Reemergence of adrenocorticotrophic hormone as novel therapy for focal segmental glomerulosclerosis [ASN abstract SA-PO1031]. *J Am Soc Nephrol.* 2012;23(suppl):879A
 37. Lafayette RA, Root C, Metha K. Adrenocorticotrophic hormone (ACTH) for the treatment of primary focal glomerulosclerosis (FSGS) [NKF abstract 140]. *Am J Kidney Dis.* 2012;59(4):B49

38. Lieberman K. A pooled analysis of early use of adrenocorticotrophic hormone in nephrotic syndrome [ASN abstract PUB254]. *J Am Soc Nephrol*. 2014;25(suppl):952A
39. Lieberman KV. Adrenocorticotrophic hormone for steroid-resistant and oral steroid-intolerant children with minimal change nephrotic syndrome. *J Clin Ped Nephrol*. 2014;2(2):1-4
40. Lieberman KV, Pavlova-Wolf A. Adrenocorticotrophic hormone therapy for the treatment of Idiopathic Nephrotic Syndrome in children and young adults: A systematic review of early clinical studies [ESPN abstract P-391]. *Pediatr Nephrol*. 2015;30(1694).
41. Madan A, Teehan GS, Stankovic AK. Treatment response to H.P. Acthar Gel in patients with idiopathic focal segmental glomerulosclerosis and idiopathic membranous nephropathy: A retrospective case series [ASN abstract TH-PO437]. *J Am Soc Nephrol*. 2014;25(suppl):206A
42. Madan A. Repository corticotropin injection in a patient presenting with focal segmental glomerulosclerosis, rheumatoid arthritis, and optic neuritis: A case report. *Int J Gen Med*. 2015;8:119-124
43. Madan A, Milward AS, Khastgir A. Treatment of nephrotic syndrome with Acthar Gel: A retrospective case series [NKF abstract 227]. *Am J Kidney Dis*. 2014;63(5):A75
44. Madan A, Mijovic-Das S, Stankovic A, Teehan G, Milward AS, Khastgir A. Acthar gel in the treatment of nephrotic syndrome: A multicenter retrospective case series. *BMC Nephrol*. 2016;17(1):37. [Link](#)
45. Mamlouk O, Workeneh B. A case of relapsing immunoglobulin A nephropathy secondary to immunotherapy. *J. Onco-Nephrol*. 2020;4(3):87-91.
46. Marayati F. Long-term H.P. Acthar® Gel treatment of relapsing idiopathic membranous glomerulopathy: A case study [ASN abstract PUB206]. *J Am Soc Nephrol*. 2015;26(suppl):934A.
47. Markell M, Brar A, Bhela S, Patel A, Salifu M. Use of repository corticotropin gel (Acthar) in progressive nephrotic syndrome secondary to transplant glomerulopathy: a report of three cases. *Kidney Med*. 2019;1(1):31-35.
48. Maroz N, Reuben S, Nadasdy T. Treatment of fibrillary glomerulonephritis with use of repository corticotropin injections. *Clin Kidney J*. 2018;11(6):788-790. [Link](#).
49. McCracken C, Benfield E, Leong T, Lieberman K, Greenbaum L, Lang D, Benfield M. ACTHar use in childhood nephrotic syndrome [PAS abstract 1809.78]. *Abstract presented at Pediatric Academic Societies Meeting 2019, April 24 - May 1, 2019, Baltimore, MD*. April 2019.
50. McHugh PP, Muhammad AM, Asif AS, Muhammad SY, Tim ET. Treatment of post-transplant immunosuppression resistant focal segmental glomerulosclerosis with adrenocorticotrophic gel [ASN abstract FR-PO1135]. *J Am Soc Nephrol*. 2013;24(suppl):624A
51. McMahan BA, Berliner AR. Treatment of severe resistant idiopathic membranous glomerulopathy with adrenocorticotrophic hormone gel: a case report. [ASN abstract SA-PO032] *J Am Soc Nephrol*. 2015;26(suppl):631A.
52. Melhem AY, Schmitz P. Single center experience with ACTH for the treatment of resistant nephrotic syndrome [ASN abstract SA-PO677]. *J Am Soc Nephrol*. 2013;24(suppl):783A-784A.
53. Meliambro K, Sharma S, Campbell KN. Treatment-refractory histologic tip-variant FSGS in a patient with systemic lupus erythematosus [NKF abstract 68]. *Am J Kidney Dis*. 2014;63(5):A35
54. Mittal T, Dedhia P, Roy-Chaudhury P, et al. Complete remission of post-transplantation recurrence of focal segmental glomerulosclerosis with the use of adrenocorticotrophic hormone gel: Case report. *Transplant Proc*. 2015;47(7):2219-2222. [Link](#)
55. Monk RD. Complete Remission of severe nephrotic syndrome and AKI in collapsing FSGS with a combination of ACTH Gel and Abatacept – a case report. [ASN abstract PUB494] *J Am Soc Nephrol*. 2017;28(suppl):1090.
56. Naseer MS, Singh A, Singh N. Repository corticotropin in treating de-novo C3 glomerulonephritis post-transplantation. *Glomerular Dis*. 2021:[published online: October 22, 2021].
57. Nazmul M, Alouch N. A rare case of primary membranous glomerulonephritis in HIV successfully treated with adrenocorticotrophic injection gel (Acthar) [ASN abstract PUB182]. *J Am Soc Nephrol*. 2020;31:840.

58. Nguyen V, El-Meanawy A. ACTH a novel treatment for IgA nephropathy [CSCTR/MWAFMR abstract 104]. *J Investig Med*. 2014;62(4):719-720
59. Patel AB, Markell MS. Use of ACTH gel in a patient with progressive nephrotic syndrome secondary to transplant glomerulopathy (TG) [ASN abstract TH-PO1140]. *J Am Soc Nephrol*. 2012;23(suppl):365A
60. Ramirez PJF, Mohamed AE-H, Cornea V, Alachkar N. Treatment of recurrent focal segmental glomerulosclerosis (FSGS) in a post kidney transplant recipient with adrenocorticotrophic hormone (ACTH) gel [ASN abstract PUB539]. *J Am Soc Nephrol*. 2016;27(suppl):1027A.
61. Reuben S, Maroz N. Treatment of fibrillary glomerulonephritis with use of repository corticotropin injections (Acthar®) [ASN abstract TH-POO018] . *J Am Soc Nephrol*. 2016;27(suppl):99A.
62. Sandhu A, Duarte H, Maroz N. Unmasking of pancreatobiliary carcinoma in a patient with fibrillary glomerulonephritis [ASN abstract PUB168]. *J Am Soc Nephrol*. 2020;31:836.
63. Saxon D, El-Husseini A, Jennings S, Cornea V, Sawaya BP. Successful treatment of an unusual case of membranous nephropathy with adrenocorticotrophic hormone gel in HIV patient [NKF abstract 307]. *Am J Kidney Dis*. 2016;67(5):A95
64. Shirsat PD, Habib SY. Use of ACTH gel in a patient with progressive nephrotic syndrome secondary to transplant glomerulopathy (TG) [ASN FR-PO1088]. *J Am Soc Nephrol*. 2013;24(suppl):613A
65. Shrivastava S, Chen B, Dworkin LD, Malhotra DK, Gong R. Relapse of nephrotic syndrome after adrenocorticotrophic hormone-induced remission: implications of adrenocorticotrophic hormone antibodies. *Am J Nephrol*. 2020;51:390–394. [Link](#)
66. Tan M, Maybel M, Yap L,W. Use of ACTH gel (Acthar) as rescue therapy for transplant glomerulopathy (TG) in two kidney transplant recipients: Short and long term follow-up [ASN abstract SA-PO768]. *J Am Soc Nephrol*. 2014;25(suppl):814A
67. Tumlin JA, Rovin BH, Paxton WG, Ayoub I, Almaani S, Caster DJ, Appel AS, Appel GB. A Prospective, Open Label Study of the safety and treatment efficacy of ACTHar Gel for fibrillary glomerulonephritis [ASN abstract SA-PO659]. *J Am Soc Nephrol*. 2016;27 (suppl):781A.
68. Tumlin JA, Galphin CM, Rovin BH. Steroid resistant nephrotic syndrome: A prospective, open label study of the safety and efficacy of combination tacrolimus and ACTHar gel therapy [ASN abstract FR-PO434]. *J Am Soc Nephrol*. 2015;26(suppl):455A.
69. Tumlin JA, Galphin CM, Rovin BH. Advanced diabetic nephropathy with nephrotic range proteinuria: Long- term efficacy of subcutaneous adrenocorticotrophic hormone (ACTH) therapy on proteinuria and urinary vascular endothelial growth factor (VEGF) levels [ASN abstract TH-OR073]. *J Am Soc Nephrol*. 2011;22(suppl):18A
70. Tumlin JA. Safety and efficacy of Acthar Gel (ACTH) on albuminuria and progression of diabetic nephropathy in patients with nephrotic range proteinuria: A randomized prospective study [ASN abstract SA-PO2471]. *J Am Soc Nephrol*. 2010;21(suppl):678A
71. Tumlin J, Galphin C, Santos R, Rovin B. Safety and efficacy of combination ACTHar Gel and Tacrolimus in treatment resistant focal segmental glomerulosclerosis (FSGS) and membranous glomerulopathy. *Kidney Int Rep*. 2017; 2(5):924-932.
72. Tumlin JA, Rovin BH, Lafayette RA, et al. Treatment of proteinuria due to treatment resistant or treatment intolerant idiopathic focal segmental glomerulosclerosis: a 2 part prospective study of H.P. Acthar® Gel (PODOCYTE) [ASN abstract PUB515] *J Am Soc Nephrol*. 2017;28(suppl):1095-1096.
73. Tumlin JA, Lafayette RA, Bomback AS, Podoll AS. A multicenter, prospective, open-labeled study of Acthar gel alone or with tacrolimus to reduce urinary proteinuria in patients with idiopathic DNA-JB9-positive fibrillary glomerulopathy [ASN abstract PO1653]. *J Am Soc Nephrol*. 2021;32:515-516.
74. Vaitla P, Daswatta D, Guasch A. Recurrence of FSGS post kidney transplantation: salvage therapy with Acthar Gel [ATS abstract 344]. *Am J Transplant*. 2016;16(suppl 3):344.
75. Vasin D. Partial remission of fibrillary glomerulonephritis with crescentic and necrotizing features treated with H.P. Acthar® Gel [NKF abstract 290]. *Am J Kidney Diseases*. 2015;65(4):A87.

76. Venkataraman S, Crowther BR, Grafals M. Case study of repository corticotropin injection (RCI) prophylaxis for FSGS recurrence in kidney transplant [ASN abstract PO2569]. *J Am Soc Nephrol*. 2020;31(suppl 1):779.
77. Wang C, McCracken C, Leong T, Travers C, Gbadegesin R, Quiroga A, Benfield M, Hidalgo G, Srivastava T, Lo M, Yadin O, Mathias R, Khalid M, Orjuela A, Zaritsky J, Al-Akash S, Kamel M, Greenbaum L. Adrenocorticotrophic Hormone for childhood nephrotic syndrome - the ATLANTIS randomized controlled trial, a midwest pediatric nephrology consortium study [PAS abstract 1852.2] Abstract presented at Pediatric Academic Societies Meeting 2018, May 5-8, 2018, Toronto, Canada. 2018.
78. Wang CS, Travers C, McCracken C, Leong T, Gbadegesin R, Quiroga A, Benfield MR, Hidalgo G, Srivastava T, Lo M, Yadin O, Mathias R, Araya CE, Khalid M, Orjuela A, Zaritsky J, Al-Akash S, Kamel M, Greenbaum LA. Adrenocorticotrophic hormone for childhood nephrotic syndrome: The ATLANTIS randomized trial. *Clin J Am Soc Nephrol*. 2018;13(12):1859-1865. [Link](#).
79. Watson MJ. Membranous glomerulopathy and treatment with Acthar®: A case study. *Int J Nephrol Renovasc Dis*. 2013;6:229-232. [Link](#)
80. Welik RA. Adrenocorticotrophic hormone therapy for idiopathic glomerulonephritis: 6-week interim data from an ongoing, 6-month trial [ASN abstract PUB712]. *J Am Soc Nephrol*. 2012;23(suppl):1051A
81. Wetmore JB, Haifeng G, Gilbertson DT. Prevalence of glomerulonephritis in the U.S. Medicare population [ASN abstract FR-PO906]. *J Am Soc Nephrol*. 2014;25(suppl):579A.
82. Zand L, Canetta P, Lafayette R, Aslam N, Jan N, Sethi S, Fervenza FC. An open-label pilot study of ACTH in the treatment of IgA nephropathy at high risk of progression. *Kidney Int Rep*. 2020;5(1):58-65
83. Zand L, Canetta PA, Lafayette RA, Aslam N, Sethi S, Leung N, Fervenza FC. An open-label pilot study of ACTH in the treatment of IgA nephropathy at high risk of progression [ASN abstract SA-OR062]. *J Am Soc Nephrol*. 2018;29(suppl):95.
84. Zaw TN, Zenenberg RD. Minimal change disease and dialysis dependent acute kidney injury treated with ACTHar and low dose Tacrolimus [ASN abstract FR-PO338]. *J Am Soc Nephrol*. 2014;25(suppl):509a.

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85. Denburg M, Bailey C, Razzaghi H, Soranno D, Pollack A, Claes DJ, Dharnidharka VR, Smoyer WE, Somers MJ, Zaritsky J, Flynn JT, Mitsnefes M, Benton M, Mariani LH, Forrest CB, Furth SL. Development and validation of an EHR-based computable phenotype to rapidly identify glomerular disease in large populations. *J Am Soc Nephrol*. 28(suppl):45.
86. Hurtado TB, Rex R, Robinson J. Comparing and contrasting glomerular disease patients: A real-world analysis showing demographic, clinical, and treatment differences across more than 1,000 patients [ASN abstract PO1559]. *J Am Soc Nephrol*. 2021;32(suppl):489.
87. Nazareth T, Kariburyo F, Pirani A, Kirkemo A, Xie L, Vaidya N, Philbin M. Patients with Nephrotic Syndrome (NS) receiving Repository Corticotropin Injection (RCI) or Rituximab (RTX): Real-world (RW) evidence from a US claims analysis [NKF abstract 211]. *Am J Kidney Dis*. 2017;69(4):A69.
88. Nazareth TA, Kariburyo F, Kirkemo A, et al. Patients with focal segmental glomerulosclerosis (FSGS): a claims analysis of clinical and economic outcomes [ASN abstract TH-PO168]. *J Am Soc Nephrol*. 2017;28(suppl):147.
89. Nazareth TA, Kariburyo F, Kirkemo A, et al. Patients with membranous nephropathy (MN): a real-world (RW) clinical and economic analysis. [ASN abstract TH-PO138]. *J Am Soc Nephrol*. 28(suppl):138.
90. Nazareth TA, Kariburyo F, Kirkemo A, Xie L, Pavlova-Wolf A, Bartels-Peculis L, Vaidya N, Sim JJ. Patients with idiopathic membranous nephropathy: a real-world clinical and economic analysis of U.S. claims data. *J Manag Care Spec Pharm*. 2019;25(9):1011-1020 [Link](#)
91. Rice JB, Panaccio MP, White A, Simes M, Billmyer E, Downes N, Niewoehner J, Wan GJ. Consequences of insurance denials among U.S. patients prescribed repository corticotropin injection (Acthar Gel) for nephrotic syndrome. *Curr Med Res Opin*. 2021;37(3):431-441. [Link](#)
92. Sim JJ, Bhandari SK, Batech M, Hever A, Harrison TN, Shu YH, Kujubu DA, Jonelis TY, Kanter MH, Jacobsen SJ. End-stage renal disease and mortality outcomes across different

glomerulonephropathies in a large diverse US population. *Mayo Clinic Proceedings*. 2018;93(2):167-17. [Link](#)

Neurology

93. Alexander L, Cass LJ, Enders M, Sarai K. Adrenocortical response to high dosage ACTH therapy in patients with multiple sclerosis. *Confin Neurol*. 1966;28:1-17. [Link](#)
94. Alexander L, Cass LJ. The present status of ACTH therapy in multiple sclerosis. *Ann Intern Med*. 1963;58:454-471. [Link](#)
95. Alexander L, Cass LJ. Significance of dosage in ACTH therapy of multiple sclerosis. *Trans Am Neurol Assoc*. 1963;88:184-185. [Link](#)
96. Amezcua L, Axtell R, Cen S, et al. Pilot study of monthly pulse adrenocorticotrophic hormone (ACTH) or methylprednisolone as an add-on therapy to beta interferons for long-term treatment of multiple sclerosis [ECTRIMS abstract 1097]. *Mult Scler*. 2013;19(suppl 1):514-515
97. Angappan D, Sahu J, Singhi P, Malhi P. Safety, feasibility and effectiveness of oral Zonisamide monotherapy in comparison to ACTH therapy in infants with West syndrome, a randomized controlled trial [AES abstract 1.265]. Abstract presented at the American Epilepsy Society Annual Meeting 2016, December 2-6, 2016, Houston, TX. 2016.
98. Armstrong D, Said RR. Outcomes of high-dose steroid therapy for infantile spasms in children with trisomy 21. *J Child Neurol*. 2019;;34(11):646-652. [Link](#)
99. Bailey RO, Sprague CA, Heim RR, Nguyen VA. Use of Acthar Gel for MS exacerbations during Natalizumab induction and maintenance [CMSC/ACTRIMS abstract DX11]. *Int J MS Care*. 2013;15(suppl 3):83
100. Baram TZ, Mitchell WG, Tournay A, Snead OC, Hanson RA, Horton EJ. High-dose corticotropin (ACTH) versus prednisone for infantile spasms: A prospective, randomized, blinded study. *Pediatrics*. 1996;97(3):375-379. [Link](#)
101. Benedict RH, Pol J, Yasin F, Hojnacki D, Kolb C, Eckert S, Tacca B, Drake A, Wojcik C, Morrow SA, Jakimovski D, Fuchs TA, Dwyer MG, Zivadinov R, Weinstock-Guttman B. Recovery of cognitive function after relapse in multiple sclerosis. *Mult Scler*. 2021;27(1):71-78. [Link](#)
102. Bell S, Vincent J, Hammock V, et al. A comparison of the safety/tolerability and pharmacodynamics of Acthar Gel and methylprednisolone with regimens utilized for the treatment of MS exacerbations [AAN abstract P2.207]. *Neurology*. 2014;82(suppl 10):P2.207
103. Berkovich RR, Maura F, Dawood S. Adrenocorticotrophic hormone treatment of multiple sclerosis exacerbations [CMSC/ACTRIMS abstract DX66]. *Int J MS Care*. 2012;14(suppl 2):66.
104. Berkovich R, Bakshi R, Amezcua L, Axtell RC, Cen SY, Tauhid S, Neema M, Steinman L. Adrenocorticotrophic hormone versus methylprednisolone added to interferon beta in patients with multiple sclerosis experiencing breakthrough disease: A randomized, rater-blinded trial. *Ther Adv Neurol Disord*. 2017;10(1):3-17.
105. Bhalla S, Puri V, Skjei K. Fulminant vigabatrin toxicity during combination therapy with high-dose ACTH: a case series [AES abstract 2.273]. Abstract presented at the American Epilepsy Society Annual Meeting 2018, November 30 - December 4, 2018. New Orleans, LA. 2018.
106. Butterfield T, Maquera VA. Preventing new enhancing lesions and relapses after discontinuing Tysabri [CMSC/ACTRIMS abstract DX14]. *Int J MS Care*. 2013;15(suppl 3):84.
107. Cheronis C, Wolak J, Laux L, Berg AT, Millichap JJ. Combination of ACTH and Vigabatrin for the treatment of infantile spasms [AES abstract 3.167]. Abstract presented at the American Epilepsy Society Annual Meeting 2017, December 1-5, Washington, DC. 2017.
108. Chugani HT, Kumar A. Neuroinflammation in children with infantile spasms: a prospective study before and after treatment with Acthar Gel (Repository Corticotropin Injection). *J Child Neurol*. 2020;35(12):808-812. [Link](#)
109. Daniels D, Knupp K, Benke T, Wolter-Warmerdam K, Moran M, Hickey F. Infantile spasms in children with down syndrome: identification and treatment response. *Glob Pediatr Health*. 2019;6:1-8. [Link](#)

110. Demarest ST, Shellhaas RA, Gaillard WD, Keator C, Nickels KC, Hussain SA, Loddenkemper T, Patel AD, Saneto RP, Wirrell E, Sanchez Fernandez I, Chu CJ, Grinspan Z, Wusthoff CJ, Joshi S, Mohamed IS, Stafstrom CE, Stack CV, Yozawitz E, Bluvstein JS, Singh RK, Knupp KG. The impact of hypsarrhythmia on infantile spasms treatment response: Observational cohort study from the National Infantile Spasms Consortium. *Epilepsia*. 2017;58(12):2098-2103. [Link](#)
111. Dombkowski A, Cukovic D, Panday S, Sundaram S, Luat A. Altered T-cell clone diversity is associated with successful response to Acthar Gel treatment in infantile spasm patients [AES abstract 436]. *Abstract presented at American epilepsy society*, December 4-8, 2020, Virtual Meeting. 2020.
112. Dreifuss F, Farwell J, Holmes G, Joseph C, Lockman L, Madsen JA, Minarcik CJJ, Rothner AD, Shewmon DA. Infantile spasms. Comparative trial of nitrazepam and corticotropin. *Arch Neurol*. 1986;43(11):1107-1110. [Link](#)
113. Due BR, Coyle PK, Becker PM, Vollmer T. A prospective observational registry of H.P. Acthar Gel for the treatment of multiple sclerosis relapse [CMSC abstract RT01]. *Int J MS Care*. 2017 May;19(suppl 1):78.
114. Due BR, Becker PM, Coyle PK. A prospective observational registry of repository corticotropin injection for the treatment of multiple sclerosis relapse: baseline characteristics and interim results [CMSC abstract RT02] *Int J MS Care*. 2018;20(suppl 1):89.
115. Due B, Becker P, Coyle P. A prospective observational registry of repository corticotropin injection for the treatment of multiple sclerosis relapse: baseline characteristics and updated interim results [ECTRIMS abstract EP1690]. *Mult Scler*. 2018;24(suppl 2):905.
116. Eliyan Y, Heesch J, Alayari A, Rajaraman RR, Sankar R, Hussain SA. Very-high-dose prednisolone before ACTH for treatment of infantile spasms: evaluation of a standardized protocol. *Pediatr Neurol*. 2019; 99:16-22. [Link](#)
117. English JB, Strickland S, English PJ. Methylprednisolone treatment, patient reported tolerance and efficacy [CMSC/ACTRIMS abstract DX11]. *Int J MS Care*. 2016;18(suppl 1):45.
118. Goldstick L, Miller A, Due B, Bauer W, Zhao E, Cohen J, Robertson D, Wynn D. Study design of the randomized, double-blind, placebo-controlled options study of repository corticotropin injection for acute exacerbations of RRMS [ACTRIMS abstract P069]. *Mult Scler*. 2020;26(suppl 1):48.
119. Grinspan ZM, Knupp KG, Patel AD, Yozawitz EG, Wusthoff CJ, Wirrell E, Valencia I, Singhal NS, Nordli DR, Mytinger JR, Mitchell W, Keator CG, Loddenkemper T, Hussain SA, Harini C, Gaillard WD, Fernandez IS, Coryell J, Chu CJ, Berg AT, Shellhaas RA. Comparative effectiveness of initial treatment for infantile spasms in a contemporary US cohort. *Neurology*. 2021; 97(12):e1217-e1228. [Link](#)
120. Hodgeman RM, Kapur K, Paris A, et al. Effectiveness of once-daily high-dose ACTH for infantile spasms. *Epilepsy Behav*. 2016;59:4-8. [Link](#)
121. Hrachovy RA, Frost JD, Glaze DG. High-dose, long-duration versus low-dose, short-duration corticotropin therapy for infantile spasms. *J Pediatr*. 1994;124(5 Pt.1):803-806. [Link](#)
122. Hrachovy RA, Frost JD, Kellaway P, Zion TE. Double-blind study of ACTH vs prednisone therapy in infantile spasms. *J Pediatr*. 1983;103(4):641-645. [Link](#)
123. Hrachovy RA, Frost JD, Kellaway P, Zion T. A controlled study of ACTH therapy in infantile spasms. *Epilepsia*. 1980;21(6):631-636. [Link](#)
124. Hussain SA, Shinnar S, Kwong G, et al. Treatment of infantile spasms with very high dose prednisolone before high dose adrenocorticotrophic hormone. *Epilepsia*. 2014;55(1):103-107. [Link](#)
125. Javed A, Berkovich R, Hendin B, Miller A, Tornatore C. Use of patient case scenarios to assess current practice patterns of MS relapse assessment and treatment among MS specialists in the United States [ECTRIMS abstract P671]. *Mult Scler*. 2015; 23(sup 11): 329.
126. Kamen GF, Erdman GL. Subdural administration of hydrocortisone in multiple sclerosis: effect of ACTH. *J Am Geriatr Soc*. 1953;1(11):794-804. [Link](#).
127. Kaplan J, Miller T, Baker M, Due B, Zhao E. Efficacy and safety outcomes from a prospective observational registry of repository corticotropin injection for relapse of multiple sclerosis [CMSC abstract RTH03]. *Int J MS Care*. 2020;22(S2):77-78.

128. Kaplan J, Miller T, Baker M, Due B, Zhao E. Topline results of a prospective observational registry of repository corticotropin injection for the treatment of multiple sclerosis relapse [ACTRIMS abstract P070]. *Abstract presented at ACTRIMS Forum*. February 27-29, 2020, West Palm Beach, FL. 2020.
129. Kaplan J, Miller T, Baker M, Due B, Zhao E, Wan G. Patient-reported outcomes from a prospective observational registry of repository corticotropin injection for the treatment of multiple sclerosis relapse [AMCP abstract G22]. *J Managed Care Spec Pharm*. 2020;26(4-a):S42.
130. Kaplan J, Miller T, Baker M, Due B, Zhao E. A prospective observational registry study of repository corticotropin injection for the treatment of multiple sclerosis relapse [AAN abstract 4503]. 2020;94(15 suppl):4503.
131. Kaplan J, Miller T, Baker M, Due B, Zhao E. A prospective observational registry of repository corticotropin injection (Acthar® gel) for the treatment of multiple sclerosis relapse. *Front Neurol*. 2020;11:598496. [Link](#)
132. Kaplan J, Miller T, Baker M, Due B, Zhao E. Improvement in quality measures with repository corticotropin injection (Acthar® Gel) in a prospective observational study of multiple sclerosis relapse [CNS abstract]. *Abstract presented at the CNS Summit*. October 29 - November 1, 2020 Virtual Meeting. 2020.
133. Kaplan J, Miller T, Baker M, Due B, Zhao E, Wan G. Outcomes from a prospective observational registry of repository corticotropin injection for the treatment of multiple sclerosis relapse [ACTRIMS-ECTRIMS abstract P0895] . *Mult Scler*. 2020;26(suppl 3):543-544.
134. Knupp KG, Leister E, Coryell J, Nickels KC, Ryan N, Juarez-Colunga E, Gaillard WD, Mytinger JR, Berg AT, Millichap J, Nordli DR Jr, Joshi S, Shellhaas RA, Loddenkemper T, Dlugos D, Wirrell E, Sullivan J, Hartman AL, Kossoff EH, Grinspan ZM, Hamikawa L. Response to second treatment after initial failed treatment in a multicenter prospective infantile spasms cohort. *Epilepsia*. 2016;57(11):1834-1842. [Link](#)
135. Knupp K, Wirrell E, Berg A, Khan S. The national infantile spasms consortium (NISC), A US multicenter initiative to improve treatment and outcomes of infantile spasms: Etiologies, initial therapies and early follow up [AES abstract 1.149]. *Epilepsy Curr*. 2013;14(suppl 1):68-69.
136. Knupp KG, Coryell J, Nickels KC, et al. Response to treatment in a prospective national infantile spasms cohort. *Ann Neurol*. 2016;79(3):475-84. [Link](#)
137. Kossoff EH, Hedderick EF, Turner Z, Freeman JM. A case-control evaluation of the ketogenic diet versus ACTH for new-onset infantile spasms. *Epilepsia*. 2008;49(9):1504 -9. [Link](#)
138. Kumar A, Kumar A, Chugani H. Prospective evaluation of neuroinflammation in children with infantile spasms using C-11-PK11195 positron emission tomography and its response to ACTH treatment [AES abstract 2.073]. Abstract presented at the American Epilepsy Society Annual Meeting 2017, December 1-5 2017, Washington, DC . 2017.
139. Kunker KA, Drake AS, Irwin LN, Khan A, Bucello M, Weinstock-Guttman B, Benedict RHB. Cognitive changes in Multiple Sclerosis patients treated with subcutaneous adrenocorticotrophic hormone for acute relapse. [ECTRIMS abstract P1111]. *ECTRIMS Online Library*. 2016;145795.
140. Kutz C. A retrospective study of utilization of repository corticotropin injection (HP Acthar Gel) as pretreatment for Alemtuzumab infusion. *J Mult Scler* . 2020;7(1):1-5.
141. Kutz C. H.P. Acthar Gel (repository corticotropin injection) treatment of patients with multiple sclerosis and diabetes. *Ther Adv Chronic Dis*. 2016;7(4):190-197. [Link](#)
142. Kutz CF. Repository corticotropin injection relapse treatment in patients with multiple sclerosis and diabetes [ECTRIMS abstract EP1353]. *Mult Scler*. 2015; 23(sup 11): 708
143. Kutz CF, Dix AL. Repository corticotropin injection in multiple sclerosis: an update. *Neurodegener Dis Manag*. 2018; 8(4):217-225. [Link](#)
144. Lehrer GM. Treatment of MS with Acthar Gel-clinical experience and case presentation [ANA abstract T1819]. *Ann Neurol*. 2012;72(suppl 16):S114.
145. Liebling MS, Starc TJ, McAlister WH, Ruzal-Shapiro CB, Abramson SJ, Berdon WE. ACTH induced adrenal enlargement in infants treated for infantile spasms and acute cerebellar encephalopathy. *Pediatr Radiol*. 1993;23(6):454-456. [Link](#)

146. Lombroso CT. A prospective study of infantile spasms: clinical and therapeutic correlations. *Epilepsia*. 1983;24(2):135-158. [Link](#)
147. McGarry L, Messer R, Cree-Green M, Ray K, Knupp K. Incidence of hypertension among children treated with adrenocorticotrophic hormone (ACTH) or prednisolone for infantile spasms. *J Child Neurol*. 2020;35(3):215-220. [Link](#)
148. Miller A, Goldstick L, Bauer W, Zhao E, Tarau E, Cohen J, Robertson D, Wynn D. Results from a multicentre, randomised, double blind, placebo-controlled study of repository corticotropin injection for multiple sclerosis relapse that inadequately responded to corticosteroids [ECTRIMS abstract P107] . *Mult Scler*. 2021;27(2S):202-203.
149. Molitor RE, Stewart J. Home intravenous administration of adrenocorticotrophic hormone in patients with multiple sclerosis. *J Intraven Nurs*. 1988;11(4):249-251. [Link](#)
150. Mytinger JR, Weber A, Heyer GL. The response to ACTH is determined early in the treatment of infantile spasms [AES abstract 3.144]. *Epilepsy Curr*. 2014;14(suppl 1):360
151. Mytinger JR, Weber A, Heyer GL. The response to ACTH is determined early in the treatment of infantile spasms. *Epileptic Disord*. 2015;17(1):52-57. [Link](#)
152. Mytinger J, Albert D, Twanow J, Vidaurre J, Tan Y, Brock G, Ostendorf A. Compliance with standard therapies and remission rates after implementation of an infantile spasms management guideline. *Pediatr Neurol*. 2020;104:23-29. [Link](#)
153. Murray S., Woo A. Clinical experience with repository corticotropin injection in patients with multiple sclerosis experiencing mood changes with intravenous methylprednisolone: A case series. *Ther Adv Neurol Disord*. 2016. 2016;9(3):189-197. [Link](#)
154. Napoli S. ACTH gel in the treatment of multiple sclerosis exacerbation: A case study. *Int Med Case Rep J*. 2015;2015(8):23-27. [Link](#)
155. Nickerson M, Cofield SS, Tyry T, Salter AR, Cutter GR, Marrie RA. Impact of multiple sclerosis relapse: The NARCOMS participant perspective. *Mult Scler Relat Disord*. 2015;4(3):234-240. [Link](#)
156. Pagnotta PA, LaGanke C, Easterling CB Using Acthar in Lemtrada infusion protocol [CMSC/ACTRIMS abstract DX53] *Int J MS Care*. 2017;19(suppl 1):31
157. Park JT, Chugani HT. Epileptic spasms in paediatric post-traumatic epilepsy at a tertiary referral centre. *Epileptic Disord*. 2017;19(1):24-34. [Link](#)
158. Partikian A, Mitchell WG. Major adverse events associated with treatment of infantile spasms. *J Child Neurol*. 2007;22(12):1360-1366. [Link](#)
159. Pauli L, O'Neil R, Ybanez M, Livingston S. Minor motor epilepsy. Treatment with corticotropin (ACTH) and steroid therapy. *JAMA*. 1960;174:1408-1412. [Link](#)
160. Pol J, Yasin F, Wojcik C, Conway D, Morrow S, Eckert S, Drake A, Hojnacki D, Kolb C, Dwyer M, Zivadinov R, Weinstock-Guttman B, Benedict R. Replication of cognitive relapse phenomenon in multiple sclerosis in association with gadolinium enhancing lesions [ECTRIMS abstract P841]. *Mult Scler*. 2018;24(suppl 2):444-445.
161. Pranzatelli MR, Tate ED, McGee NR, et al. Key role of CXCL13/CXCR5 axis for cerebrospinal fluid B cell recruitment in pediatric OMS. *J Neuroimmunol*. 2012;243(1-2):81-88. [Link](#)
162. Pranzatelli MR, Tate ED, Verhulst SJ, et al. Pediatric dosing of Rituximab revisited: Serum concentrations in opsoclonus-myoclonus syndrome. *J Pediatr Hematol Oncol*. 2010;32(5):e167-e172. [Link](#)
163. Pranzatelli MR, Tate ED, Crowley JM, Toennies B, Creer M. Neurometabolic effects of ACTH on free amino compounds in opsoclonus-myoclonus syndrome. *Neuropediatrics*. 2008;39(3):164-171. [Link](#)
164. Pranzatelli MR, Chun KY, Moxness M, Tate ED, Allison TJ. Cerebrospinal fluid ACTH and cortisol in opsoclonus-myoclonus: Effect of therapy. *Pediatr Neurol*. 2005;33(2):121-126. [Link](#)
165. Pranzatelli MR, Huang YY, Tate E, et al. Monoaminergic effects of high-dose corticotropin in corticotropin-responsive pediatric opsoclonus-myoclonus. *Mov Disord*. 1998;13(3):522-528. [Link](#)
166. Pranzatelli MR, Tate ED, Swan JA, Travelstead AL, Colliver JA, Verhulst SJ, Crosley CJ, Graf WD, Joseph SA, Kelfer HM, Raju GP. B cell depletion therapy for new-onset opsoclonus-myoclonus. *Mov Disord*. 2010;25(2):238-242.

167. Pranzatelli MR, Tate ED, Travelstead AL, Colliver JA. Long-term cerebrospinal fluid and blood lymphocyte dynamics after rituximab for pediatric opsoclonus-myoclonus. *J Clin Immunol.* 2010;30(1):106-113. [Link](#)
168. Pranzatelli MR, Allison TJ, Tate ED. Effect of low-dose cyclophosphamide, ACTH, and IVIG combination immunotherapy on neuroinflammation in pediatric-onset OMS: A retrospective pilot study. *Eur J Paediatr Neurol.* 2018; 22(4):586-594. [Link](#)
169. Rao JK, Willis J. Hypothalamo-pituitary-adrenal function in infantile spasms: effects of ACTH therapy. *J Child Neurol.* 1987;2(3):220-223. [Link](#)
170. Rose AS, Kuzma JW, Kurtzke JF, Namerow NS, Sibley WA, Tourtellotte WW. Cooperative study in the evaluation of therapy in multiple sclerosis. ACTH vs. placebo--final report. *Neurology.* 1970;20(5):1-59. [Link](#)
171. Ross AP, Halper J, Harris CJ. Assessing relapses and response to relapse treatment in patients with multiple sclerosis: A nursing perspective. *Int J MS Care.* 2012;14(3):148-159. [Link](#)
172. Ross DL. Suppressed pituitary ACTH response after ACTH treatment of infantile spasms. *J Child Neurol.* 1986;1(1):34-37. [Link](#)
173. Ryan N, Coryell J, Nickels K, Mytinger J, Knupp K. The national infantile spasms consortium (NISC): Moving towards standardization of care and improved treatment and outcomes in infantile spasms [AES abstract 3.223]. *Abstract presented at the American Epilepsy Society Annual Meeting 2014*, December 5-9, 2014, Seattle WA.
174. Sher PK, Sheikh MR. Therapeutic efficacy of ACTH in symptomatic infantile spasms with hypsarrhythmia. *Pediatr Neurol.* 1993;9(6):451-456. [Link](#).
175. Simsarian JP, Saunders C, Smith DM. Five-day regimen of intramuscular or subcutaneous self-administered adrenocorticotrophic hormone gel for acute exacerbations of multiple sclerosis: A prospective, randomized, open-label pilot trial. *Drug Design.* 2011;5:381-389. [Link](#)
176. Singer WD, Rabe EF, Haller JS. The effect of ACTH therapy upon infantile spasms. *J Pediatr.* 1980;96(3 pt 1):485-489. [Link](#)
177. Snead OC III, Benton JW, Myers GJ. ACTH and prednisone in childhood seizure disorders. *Neurology.* 1983;33(8):966-970. [Link](#)
178. Snead OC III. Treatment of infantile spasms. *Pediatr Neurol.* 1990;6(3):147-150. [Link](#)
179. Snead OC III, Benton JW, Hosey LC, et al. Treatment of infantile spasms with high-dose ACTH: Efficacy and plasma levels of ACTH and cortisol. *Neurology* 39. 1989;39(8):1027-1031. [Link](#)
180. Tanritanir A, Wang X, Loddenkemper T. ACTH effects on electrophysiological biomarkers in patients with epileptic spasms [ACNS abstract F20]. *J Clin Neurophysiol.* 2019;36(6):480.
181. Tanritanir A, Jafarpour S, Rakesh K, Connolly J, Xiaofan W, Harini C, Loddenkemper T. Electrophysiological and clinical biomarkers of ACTH (Acthar Gel) treatment [AES abstract 1.104]. Abstract presented at the American Epilepsy Society Annual Meeting 2017, December 1-5, Washington, DC. 2017.
182. Tate ED, Pranzatelli MR, Verhulst SJ, et al. Active comparator-controlled, rater-blinded study of corticotropin-based immunotherapies for opsoclonus-myoclonus syndrome. *Journal of Child Neurology.* 2012;27(7):875-884. [Link](#)
183. Taylor JB, Young WO, Rutar T. Posterior subcapsular cataracts in children receiving adrenocorticotrophic hormone (ACTH) for infantile spasms. *J Child Neurol.* 2010;25(8):1017-1019. [Link](#)
184. Vajjala V, Hosain S. GRIN2A mutation with refractory epilepsy and response to ACTH therapy [AES abstract 2.097]. Abstract presented at the American Epilepsy Society Annual Meeting 2016, December 2-6, 2016, Houston, TX. 2016
185. VanMeter S, Becker P, Lester M, Fang L, Zhao E. Post-Hoc analyses using PRO-ACT Database (PRO-ACT) to evaluate Repository Corticotropin Injection (RCI; H.P. Acthar® Gel) as a potential treatment for ALS. Abstract presented at the 16th Annual NEALS Meeting, October 3-5, 2017, Clearwater Beach, FL. 2017.
186. VanMeter S, Becker P, Mackey L, Fang L, Zhao E. Post hoc analysis using PRO-ACT database to evaluate Repository Corticotropin Injection (HP Acthar® Gel) as a potential treatment for ALS [AAN abstract P5. 327]. *Neurology.* 2018;90(15 suppl):P5.32

187. Wang J, Wang J, Zhang Y, et al. Proteomic analysis of adrenocorticotrophic hormone treatment of an infantile spasm model induced by N-methyl-D-aspartic acid and prenatal stress. *PLoS One*. 2012;7(9):e45347. [Link](#)
188. Watemberg N. Infantile spasms: Treatment challenges. *Curr Treat Options Neurol*. 2012;14:322-331. [Link](#)
189. Weatherspoon S, Mudigoudar B, Roark E, Wheless JW. Infantile spasms: combination therapy with high-dose ACTH and Vigabatrin [AES abstract 2.148]. Abstract presented at the American Epilepsy Society Annual Meeting 2018, November 30 - December 4 2018, New Orleans, LA. 2018.
190. Weber A, Cole JW, Mytinger JR. Infantile spasms respond poorly to topiramate. *Pediatr Neurol* 2015;53(2):130-134. [Link](#)
191. Williamson A, Smrtka J, Flemming Tracy T, et al. Assessing relapse in multiple sclerosis (ARMS) questionnaire: Pilot study [ECTRIMS abstract DX59]. *Mult Scler*. 2013;15(suppl 3):329-105
192. Wray CD, Benke TA. Effect of price increase of adrenocorticotrophic hormone on treatment practices of infantile spasms. *Pediatr Neurol*. 2010;43:163-166. [Link](#)
193. Wynn D, Goldstick LP, Bauer W, Zhao E, Tarau E, Cohen JA, Robertson D, Miller AE, Zhao E, Tarau E, Cohen JA, Robertson D, Miller AE. Results from a multicenter, randomized, double-blind, placebo-controlled study of repository corticotropin injection for relapsing-remitting multiple sclerosis [CMSC abstract RTH02]. *Int J MS Care*. 2021;23(suppl 2):76.

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194. Banfe EN, Polyakov JL, Waltrip R, Dickson RB. Understanding patient underreporting of MS relapses: insights from patients with multiple sclerosis from the Harris Poll 2017 survey [ECTRIMS - ACTRIMS abstract P1267] *Mult Scler*. 2017;23(S3):676.
195. Costello J, Njue A, Lyall M, Heyes A, Mahler N, Philbin M, Nazareth T. Efficacy, safety, and quality-of-life of treatments for acute relapses of multiple sclerosis: results from a literature review of randomized controlled trials. *Degener Neurol Neuromuscul Dis*. 2019;9:55-78. [Link](#)
196. Duchowny MS, Chopra I, Niewoehner J, Wan GJ, Devine B. A systematic literature review and indirect treatment comparison of efficacy of repository corticotropin injection versus synthetic adrenocorticotrophic hormone for infantile spasms. *J Health Econ Outcomes Res*. 2021;8(1):1-9. [Link](#)
197. Fox RJ, Templeton D, Leshner B, Malhotra M. Relapse Management in Relapsing-Remitting Multiple Sclerosis (RRMS): Results from a real-world analysis of treatment patterns [CMSC/ACTRIMS abstract SX11]. *Int J MS Care*. 2016;18(suppl 1):98.
198. Fox RJ, Acot JR, Leshner BA, Malhotra M. Relapse management in RRMS: real-world characteristics of steroid-treated patients [ECTRIMS abstract P670]. *Mult Scler*. 2015; 23(suppl 11): 328-329.
199. Gold L, Nazareth T, Tzy-Chyi Y, Fry K, Mahler N, Rava A WIR. Medication utilization patterns 90 days before initiation of treatment with repository corticotropin injection in patients with infantile spasms. *Pediatric Health Med Ther*. 2020;10:195-207.
200. Gold LS, Nazareth T, Tzy-Chyi Y, Fry K, Hansen R. Medication utilization patterns prior to repository corticotropin injection in patients with infantile spasms [AES abstract 3.279]. Abstract presented at the American Epilepsy Society Annual Meeting 2017, December 1-5, Washington, DC. 2017
201. Gold LS, Schepman PB, Wang W-J, Philbin M, Niewoehner J, Damal K, Hansen RN. Healthcare costs and resource utilization in patients with Infantile spasms treated with H.P. Acthar Gel®. *Adv Ther*. 2016;33(8):1293-1304. [Link](#)
202. Gold LS, Suh K, Schepman PB, Damal K, Hansen RN. Healthcare costs and resource utilization in patients with multiple sclerosis relapses Treated with H.P. Acthar Gel®. *Adv Ther*. 2016;33(8):1279-1292. [Link](#)
203. Gold LS, Schepman P, Niewoehner J, Philbin M, Hansen R. Healthcare resource use and costs of adrenocorticotrophic hormone in relapses of Multiple Sclerosis [WCI abstract B036]. *Inflamm Res*. 2015; 64(suppl 2): S116.
204. Hansen R, Gold L, Schepman P, Niewoehner J, Philbin M. Economic consequences of early versus late use of adrenocorticotrophic hormone therapy in infantile spasms [WCI abstract

- LB10]. Late-breaker abstract presented at *World Congress of Inflammation Meeting*; August 8-12, 2015; Boston, MA. 2015
205. Havrdova E, Bell SJ, Herman DS, Jeffery D, Nicholas JA, Tornatore C. Current MS relapse assessment practices determined by a modified Delphi process [ECTRIMS abstract EP1276]. *Mult Scler.* 2015; 23(sup 11):667
 206. Hunter SF, Bindra J, Chopra I, Niewoehner J, Panaccio MP, Wan GJ. Cost-effectiveness of repository corticotropin injection for the treatment of acute exacerbations in multiple sclerosis. *Clinicoecon Outcomes Res.* 2021;13:883-892. [Link](#)
 207. Khan O, Berkovich R, Hendin B, Javed A, Miller A, Tornatore C. Current practice patterns of MS relapse management among MS specialists in the United States: survey results of the MS relapse practice patterns project [ECTRIMS abstract EP1356]. *Mult Scler.* 2015; 23(suppl 11):709.
 208. Nazareth T, Datar M, Yu TC. Treatment effectiveness for resolution of multiple sclerosis relapse in a US health plan population. *Neurol Ther.* 2019;8(2):383-395. [Link](#).
 209. Nazareth T, Philbin M, Gallagher J, Heap K, Carrol S, Böing EA. Medical resource utilization in patients with infantile spasms after receipt of Repository Corticotropin Injection (H.P. Acthar Gel): results of a physician survey [AAN abstract P3.219]. *Neurology.* 2017;88(suppl 16):P3.219.
 210. Nazareth T, Purser M, Bhaila R, Philbin M, Mlads D. The economic burden of moderate-to-severe Multiple Sclerosis relapse in the United States: findings from a systematic literature review [AAN abstract P3.402]. *Neurology.* 2017;88(suppl 16):P3.402.
 211. Nazareth T, Polyakov L, Banfe EN, Waltrip RW, Zerkowski K, Herbert LW. Relapse prevalence, symptoms and healthcare engagement: insights from patients with multiple sclerosis from the multiple sclerosis in America 2017 survey [ECTRIMS - ACTRIMS abstract P805]. *Mult Scler.* 2017;23(S3):414-415.
 212. Nazareth T, Datar M, Sheer R, Yu TC, Schwab P. MS relapse treatments and relapse resolution: retrospective study results from a US health plan [ECTRIMS-ACTRIMS abstract P809]. *Mult Scler.* 23(S3):416-417.
 213. Nazareth T, Sheer R, Datar M, Schwab P, Yu T-C. Relapse resolution and HCRU in patients with multiple sclerosis: a retrospective study of relapse therapy alternatives to corticosteroids [ECTRIMS-ACTRIMS abstract EP1425]. *Mult Scler.* 2017;23(S3):750-751.
 214. Nazareth T, Zhang X, Yu T, Gu T, Deshpande G, Mahler N, Waltrip R, Tan H. Multiple sclerosis relapse resolution with corticosteroid alternatives: a retrospective claims analysis of US health plan data [ECTRIMS abstract EP1594]. *Mult Scler.* 2018;24(suppl 2):900.
 215. Nazareth TA, Rava AR, Polyakov JL, Banfe EN, Waltrip RW, Zerkowski KB, Herbert LB. Relapse prevalence, symptoms, and health care engagement: patient insights from the Multiple Sclerosis in America 2017 survey. *Mult Scler Relat Disord.* 2018;26:219-234. [Link](#).
 216. Njue A, Damal K, Lyall M, Costello J, Heyes A, Philbin M. Efficacy and safety of treatments for acute relapses of multiple sclerosis: Results of a systematic literature review [AMCP abstract G23]. *J Managed Care Spec Pharm.* 2016;22(suppl 4-a):S70
 217. Okimoto DM, Maru S, Numis AL, Panaccio MP, Wan GJ, Singh V. Clinical pathways leading to a diagnosis of infantile spasms using a claims database [AES abstract 1.209]. *Abstract presented at American Epilepsy Society meeting*, December 6-10, 2019, Baltimore, MD. 2019.
 218. Pellock JM, Hrachovy R, Shinnar S, et al. Infantile spasms: A U.S. consensus report. *Epilepsia.* 2010;51: 2175-2189. [Link](#)
 219. Rava A, Waltrip R, Zerkowski K, Ahsan A, Nazareth T. Correlates of healthcare-seeking behavior during relapse among patients with multiple sclerosis [ANA abstract S259]. *Ann Neurol.* 2018;84(S22):S109.
 220. Rice JB, Panaccio MP, White A, Simes M, Billmyer E, Downes N, Niewoehner J, Wan GJ. Consequences of insurance denials among U.S. patients prescribed repository corticotropin injection for acute exacerbations of multiple sclerosis. *Neurol Ther.* 2021;10(1):149-167. [Link](#)
 221. Waltrip RW, Mahler N, Ahsan A, Herbert LB. Effect of health care providers' focused discussion and proactive education about relapse management on patient reporting of multiple sclerosis relapse. *Int J MS Care.* 2021;23(4):151-156. [Link](#).

222. Wan G, Chopra I, Niewoehner J. Comparative efficacy of repository corticotropin injection versus synthetic adrenocorticotrophic hormone for infantile spasms: an indirect meta-analysis of randomized controlled trials [AES abstract 2.108]. *Abstract presented at American Epilepsy Society meeting*, December 6-10, 2019, Baltimore, MD. 2019.
223. Wan G, Chopra I, Niewoehner J. Cost per response analysis of repository corticotropin injection versus other late-line treatments for multiple sclerosis relapses in adults [ECTRIMS abstract P1059]. *Mult Scler*. 2019;25(suppl 2):569-570.
224. Wan GJ, Chopra I, Niewoehner J, Hunter SF. Cost per response analysis of repository corticotropin injection versus other alternative treatments for acute exacerbations of multiple sclerosis. *Drugs Context*. 2020;9:2020-9-4. [Link](#)

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225. Agarwal A, Hassan M, Sepah YJ, Do Diana V, Nguyen QD. Subcutaneous repository corticotropin gel for non-infectious panuveitis: Reappraisal of an old pharmacologic agent. *Am J Ophthalmol Case Rep*. 2016;4:78-82.
226. Alfano JE, Platt D. Steroid (ACTH)-induced glaucoma simulating congenital glaucoma. *Am J Ophthalmol*. 1966;61(5 Pt 1):911-912. [Link](#)
227. Anesi SD, Stephenson AP, Chang PY, Montieth A, Filipowicz A, Syeda S, Walsh M, Metzinger JL, Foster CS. Treatment of non-infectious retinal vasculitis using subcutaneous repository corticotropin injection [ARVO abstract]. *Invest Ophthalmol Vis Sci*. 2020;61(7):5355.
228. Anesi SD, Chang PY, Maleki A, Stephenson A, Montieth A, Filipowicz A, Syeda S, Asgari S, Walsh M, Metzinger JL, Foster CS. Treatment of noninfectious retinal vasculitis using subcutaneous repository corticotropin injection. *J Ophthalmic Vis Res*. 2021;16(2):219-233. [Link](#).
229. Bowden AN, Bowden PM, Friedmann AI, Perkin GD, Rose FC. A trial of corticotrophin gelatin injection in acute optic neuritis. *J Neurol Neurosurg Psychiatry*. 1974;37(8):869-873. [Link](#)
230. Carlisle N, Hari P, Brod S. Plegia to walking: AHSCBMT in severe NMOSD relapse. *BMJ Neurol Open*. 2020;2(2):e000073. [Link](#)
231. Chen E, Reynolds H, Graham L. Ocular cicatricial pemphigoid treated with intramuscular corticotropin injections. *JAAD Case Reports*. 2020;6(5):450-452. [Link](#)
232. Crane AB, Sharon Y, Chu DS. Repository corticotropin injection (RCI) in ocular inflammation: a case series and literature review [ARVO abstract 427-A0245]. Abstract presented at the Annual Meeting of the Association for Research in Vision and Ophthalmology April 29 - May 03, 2018, Honolulu, Hawaii. April 2018.
233. Eadie S, Thompson M. Kerato-conjunctivitis sicca treated with cortisone and ACTH. *Br J Ophthalmol*. 1955;39(2):90-97. [Link](#)
234. Grieco J, McLaurin E, Ousler G, Liu J, Kacmaz O, Wirta D. Topline results from a multicenter, open-label, phase 4 study of repository corticotropin injection in patients with treatment-resistant severe non-infectious keratitis [ARVO abstract 3547077]. *Invest Ophthalmol Vis Sci*. 2021;62(8):1275.
235. Islam Y, Khurshid G. An old therapy to treat a current problem: use of adrenocorticotrophic hormone in non-infectious panuveitis [ARVO abstract 3509]. *Invest Ophthalmol Vis Sci*. 2019;60(9):3509.
236. Levy-Clarke G, Taylor A, Cartaya M, Yee D, Kempen J. To evaluate the possible safety and effectiveness of HP Acthar in patients with active uveitis [IOIS abstract]. Abstract presented at the 14th congress of the International Ocular Inflammation Society, October 18-21, 2017, Lausanne, Switzerland. 2017.
237. Mann SA, Oh D, Kanu L, Lobo A-M, MacIntosh P, Bhat P. Treatment outcomes of ocular sarcoidosis with subcutaneous repository corticotropin gel [ARVO abstract 3508 - A0549]. *Invest Ophthalmol Vis*. 2019;60(9):3508.
238. Nguyen QD, Anesi SD, Chexal S, Chu DS, Dayani PN, Leng T, Meleth AD, Sallam AA, Sheppard JD, Silverstein SM, Toyos M, Wang RC, Foster CS. Management of repository corticotropin injection therapy for non-infectious uveitis: a Delphi study. *Acta Ophthalmol*. 2021;99(6):669-678. [Link](#)

239. Oh D, Singh A, Kanu L, Lobo-Chan A, MacIntosh P, Bhat P. Outcomes of repository corticotropin gel for ocular sarcoidosis. *Ocul Immunol Inflamm*. 2021;[published online: April 7, 2021]:1-5. [Link](#)
240. Scannell Bryan M, Sergott RC. Change in visual acuity and retinal structures following Repository Corticotropin Injection (RCI) therapy in patients with acute demyelinating optic neuritis: Improvement in low contrast visual acuity in both affected and contralateral eyes in a single-armed open-label study. *J Neurol Sci*. 2019;407:116505. [Link](#)
241. Sergott R, Scannell BM, Moster M, deBusk A. Corticotropin treatment of acute optic neuritis improves low contrast visual acuity in some asymptomatic eyes: repair of subclinical MS lesions [ECTRIMS abstract P406]. *Mult Scler*. 2018;24(suppl 2):169-170.
242. Sharon Y, Chu DS, Sharon Y, Chu DS, Sharon Y, Chu DS. Adrenocorticotrophic hormone analogue as novel treatment regimen in ocular cicatricial pemphigoid. *Am J Ophthalmol Case Rep*. 2018;10:264-267.
243. Sharon Y, Chu DS. Adrenocorticotrophic hormone gel for patients with non-infectious uveitis. *Am J Ophthalmol Case Rep*. 2019;15:100502. [Link](#)
244. Sharon Y, Anesi SD, Martinez CE, Huang AJW, Foster CS, Chu DS. Repository corticotropin injection as an alternative treatment for refractory ocular mucous membrane pemphigoid. *Cornea*. 2021;[published online: May 2021]. [Link](#)
245. Thorpe HE. ACTH and cortisone in ocular trauma in eye surgery: A preliminary report. *Proceedings of the Second Clinical ACTH Conference*. 1951;2(25):340-361.
246. Toyos M, Toyos R, Mulliniks H, Armstrong J. Use of H.P. Acthar Gel in chronic anterior segment inflammation unresponsive to topical medications. *J Clin Exp Ophthalmol*. 2018; 9(5):756.
247. Toyos MM, Toyos R. Use of subcutaneous H.P. Acthar gel in patients with moderate to severe dry eye [ASCRS abstract]. *Abstract presented at ASCRS Annual Meeting 2021, July 24, 2021, Las Vegas, NV*. 2021.
248. Wirta D, McLaurin E, Ousler IG, Liu J, Kacmaz O, Grieco J. Topline patient-reported outcome results from a multicenter, open-label, phase 4 study of repository corticotropin injection in patients with refractory severe noninfectious keratitis [ISPOR abstract PSS3]. *Value Health*. 2021;24(5):S1.
249. Wirta D, McLaurin E, Ousler G, Liu J, Kacmaz RO, Grieco J. Repository corticotropin injection (Acthar ® Gel) for refractory severe noninfectious keratitis: efficacy and safety from a phase 4, multicenter, open-label study. *Ophthalmol Ther*. 2021;10(4):1077-1092. [Link](#)
250. Yael S, Chu DS. ACTH analogue as treatment regimen in three cases of pan-uveitis and one case of ocular cicatricial pemphigoid [IOS abstract]. *Abstract presented at the 14th Congress of the International Ocular Inflammation Society, October 18-21, 2017, Lausanne, Switzerland*. 2017.

Ophthalmology HEOR

251. Albini TA, Rice JB, White AG, Johnson M, Reiff J, Lima AF, Bartels-Peculis L, Ciepielewska G, Nelson WW. Economic burden of non-infectious inflammatory eye disease (NIIED) in a commercially-insured population in the United States. *Ocul Immunol Inflamm*. 2020;28(1):164-174. [Link](#)
252. Nelson W, Rice JB, White JB, Lopez A, Reiff J, Bartels-Peculis L, Ciepielewska G, Lima F, Albini TA. Healthcare resource use, characteristics, and predictors of high-cost patients with non-infectious inflammatory eye disease (NIIED) in a commercially-insured US population [ARVO abstract 5223 - B0336]. *Abstract presented at the Association for Research in Vision and Ophthalmology Meeting April 29-May 3, 2018 Honolulu, HI*. 2018.
253. Nelson WW, Lima AF, Kranyak J, Opong-Owusu B, Ciepielewska G, Gallagher JR, Heap K, Carroll S. Retrospective medical record review to describe use of repository corticotropin injection among patients with uveitis in the United States. *J Ocul Pharmacol Ther*. 2019;35(3):182-188. [Link](#)
254. Rice J, White A, Scarpati L, Philbin M, Wan G, Nelson W. Burden of noninfectious inflammatory eye diseases: a systematic literature review [AMCP abstract H1]. *J Manag Care Spec Pharm*. 2017;23(3-a):S67.

Pulmonology

255. Baughman RP, Barney JB, O'Hare L, Lower EE. A retrospective pilot study examining the use of Acthar Gel in sarcoidosis patients. *Respir Med*. 2016;110:66-72. [Link](#)
256. Baughman R, Fernandez-Ulloa M, Shipley R, Thompson F, Lower E. Acthar Gel for chronic pulmonary sarcoidosis: Role of positive emission tomography in initial assessment and in response to therapy [Chest abstract]. *Chest*. 2015;148(4):392A.
257. Baughman RP, Lower EE, Lanier O'Hare, Barney JB. Acthar Gel for refractory sarcoidosis [ATS abstract A3743]. *Am J Respir Crit Care Med*. 2015;191(suppl):A3743-A3743.
258. Baughman RP, Sweiss N, Keijsers R, Birring SS, Shipley R, Saketkoo LA, Lower EE. Repository corticotropin for Chronic Pulmonary Sarcoidosis. *Lung*. 2017; 195(3):313-322. [Link](#)
259. Baughman RP, Sweiss N, Keijsers RG, Shipley R, Birring S, Saketkoo L, Lower EE. Repository corticotropin (RCI) for chronic pulmonary sarcoidosis: a single blind prospective study dose finding study [ATS abstract]. *Am J Respir Crit Care Med*. 2017;195:A4751.
260. Baughman R, Vucinic V, Obi O, Judson M, Maier L, Carmona PE, Grutters J, Wells A, Randolph A, Lower E. Anti-inflammatory therapy in advanced sarcoidosis: results from the registry for advanced sarcoidosis (REAS) [ATS abstract 56]. *Am J Respir Crit Care Med*. 2020;201:A1553. doi:[10.1164/ajrccm-conference.2020.201.1.MeetingAbstracts.A1553](https://doi.org/10.1164/ajrccm-conference.2020.201.1.MeetingAbstracts.A1553).
261. Baughman R, Mirsaeidi M, Zhao E, Houston P, Bilyk R. A phase 4, multicenter, randomized, double-blind, placebo-controlled exploratory study to assess the efficacy and safety of repository corticotropin injection in subjects with pulmonary sarcoidosis (PULSAR): study design and baseline characteristics [CHEST abstract]. *Chest*. 2021;160(4 suppl):A1271-A1272.
262. Culver D, Abraham S, Lower E, Baughman R. Changes in the cytokine profile of sarcoidosis patients treated with Acthar Gel [Chest abstract]. *Chest*. 2016;150(4 suppl):513A.
263. Judson M, Modi A, Ilyas F, Yucel R. Repository corticotropin injection (H.P. Acthar gel) for the treatment of sarcoidosis-induced hypercalciuria and vitamin D dysregulation: a pilot, open label study. *Sarcoidosis Vasc Diffuse Lung Dis*. 2018;35(3):192-197.
264. Lower EE, Sturdivant M, Grate L, Baughman RP. Use of third-line therapies in advanced sarcoidosis. *Clin Exp Rheumatol*. 2020;38(5):834-840.
265. McGuire SA, Tomasovic JJ, Stevens EA. Improvement with corticotropin of relapsing central nervous system sarcoidosis during prednisone therapy: Case report. *Mil Med*. 1983;148(5):419-420. [Link](#)
266. Modi A, Ilyas F, Rane N, Judson MA. Acthar Gel for sarcoidosis associated calcium dysregulation [ATS abstract A4749]. *Am J Respir Crit Care Med*. 2017;195:A4749.
267. Salomon A, Appel B, Collins SF, Herschfus JA, Segal MS. Sarcoidosis: Pulmonary and skin studies before and after ACTH and cortisone therapy. *Dis Chest*. 1956;29(3):277-291. [Link](#)
268. Zhou Y, Lower EE, Li H, Baughman RP. Sarcoidosis patient with lupus pernio and infliximab-induced myositis: Response to Acthar Gel. *Respir Med Case Rep*. 2016;17:5-7. [Link](#)

Pulmonology – HEOR

269. Chopra I, Qin Y, Kranyak J, Gallagher JR, Heap K, Carroll S, Wan GJ. Repository corticotropin injection in patients with advanced symptomatic sarcoidosis: retrospective analysis of medical records. *Ther Adv Respir Dis*. 2019;13:1-11. [Link](#)
270. Knight T, Philbin M, Bond C, et al. Patterns and predictors of repository corticotropin injection therapy use in patients with sarcoidosis [AMCP abstract D06]. *J Managed Care Spec Pharm*. 2016;22(suppl 4-a):S42
271. Philbin M. Resource utilization and costs in sarcoidosis patients in a commercially-insured US population [ICRPM abstract]. Abstract presented at the 2nd International Conference on Respiratory and Pulmonary Medicine 2016, October 17-18, 2016, Chicago, IL.
272. Rice, JB, White A, Lopez A, Nelson WW. High-cost sarcoidosis patients in the United States: patient characteristics and patterns of health care resource utilization. *J Manag Care Pharm*. 2017;23(12):1261-1269. [Link](#)
273. Tully T, Birring SS, Judson M, Lower EE, Baughman RP. Impact of organ involvement on quality of life in sarcoidosis: results from the registry for advanced sarcoidosis (ReAS) [ATS abstract]. *Am J Respir Crit Care Med*. 2018;197:A1519.

Rheumatology

274. Aggarwal R, Marder G, Loganathan P, et al. Efficacy and safety of adrenocorticotrophic hormone gel (Acthar Gel®) in refractory dermatomyositis or polymyositis [ACR/ARHP abstract 2363]. *Arthritis Rheumatol.* 2015;67(suppl 10).
275. Aggarwal R, Marder G, Koontz DC, Nandkumar P, Qi Z, Oddis CV. Efficacy and safety of adrenocorticotrophic hormone gel in refractory dermatomyositis and polymyositis. *Ann Rheum Dis.* 2018;77(5):720-727 [Link](#)
276. Askanase A, Munirathinam D, Zhao E, Zhu J, Connolly-Strong J, Furie R. Safety results of 50% enrollment from a multicenter, randomized, double blind, placebo controlled study to assess the efficacy and safety of repository corticotropin injection in patients with systemic lupus erythematosus despite moderate dose corticosteroid use [ACR abstract 2547]. *Arthritis Rheumatol.* 2019;71(suppl 10):4516-4518.
277. Askanase A, Zhao E, Zhu J, Connolly-Strong E, Furie R. Study design for a multicenter, randomized, double-blind, placebo-controlled study to assess the efficacy and safety of repository corticotropin injection in patients with systemic lupus erythematosus despite moderate-dose corticosteroids [EULAR abstract FRI0183]. *Ann Rheum Dis.* 2019;2019(suppl 2):A766.
278. Askanase AD, Zhao E, Zhu J, Connolly-Strong E, Furie RA. Acthar Gel (repository corticotropin injection) for persistently active SLE: study design and baseline characteristics from a multicentre, randomised, double-blind, placebo-controlled trial. *Lupus Sci Med.* 2020;7(1):e000383.
279. Askanase A, Wan G, Panaccio M, Enxu Z, Zhu J, Bilyk R, Furie R. Repository corticotropin injection (Acthar Gel) for persistently active systemic lupus erythematosus: post hoc analyses of patient-reported outcomes from a phase 4, multicenter, randomized, double-blind, placebo-controlled [ACR abstract 1842]. *Arthritis Rheumatol.* 2020;72(suppl 10):3705-3708.
280. Askanase A, Wan G, Panaccio M, Zhao E, Zhu J, Bilyk R, Furie R. Repository corticotropin injection for persistently active systemic lupus erythematosus: post hoc analyses of patient-reported outcomes from a phase 4, multicenter, randomized, double-blind, placebo-controlled trial [CCR abstract]. *Abstract Presented at Congress of Clinical Rheumatology (CCR) West 2020, October 8-11, 2020 Virtual Congress, <https://www.ccrheumatology.com/>.* October 2020:236-243.
281. Askanase AD, Wan GJ, Panaccio MP, Zhao E, Zhu J, Bilyk R, Furie RA. Patient-reported outcomes from a phase 4, multicenter, randomized, double-blind, placebo-controlled trial of repository corticotropin injection (Acthar® Gel) for persistently active systemic lupus erythematosus. *Rheumatol Ther.* 2021;8(1):573-584. [Link](#)
282. Askanase A, Wright D, Zhao E, Zhu J, Bilyk R, Furie R. Repository corticotropin injection for persistently active systemic lupus erythematosus: post hoc biomarker analyses from a phase 4, multicenter, randomized, double-blind, placebo-controlled trial. [CCR abstract]. *Abstract Presented at Congress of Clinical Rheumatology (CCR) West 2020, October 8-11, 2020, Virtual Congress, <https://www.ccrheumatology.com/>.* October 2020:26-31.
283. Askanase A, Zhao E, Zhu J, Bilyk R, Furie R. Repository corticotropin injection: effects in patients with active systemic lupus erythematosus despite treatment with glucocorticoids [CCR abstract]. *Abstract Presented at Congress of Clinical Rheumatology (CCR) West 2020, October 8-11, 2020, Virtual Congress, <https://www.ccrheumatology.com/>.* October 2020:21-25.
284. Askanase AD, Zhao E, Zhu J, Bilyk R, Furie RA. Repository corticotropin injection for persistently active systemic lupus erythematosus: results from a phase 4, multicenter, randomized, double-blind, placebo-controlled trial. *Rheumatol Ther.* 2020;7(4):893-908. [Link](#)
285. Askanase AD, Wright D, Zhao E, Zhu J, Bilyk R, Furie RA. Post hoc biomarker analyses from a phase 4, multicenter, randomized, double-blind, placebo-controlled trial of repository corticotropin injection (Acthar® Gel) for persistently active systemic lupus erythematosus. *Rheumatol Ther.* 2021;8(4):1871-1886. [Link](#).

286. Bacon PA, Daly JR, Myles AB, Savage O. Hypothalamo-pituitary-adrenal function in patients on long-term adrenocorticotrophin therapy. *Ann Rheum Dis.* 1968;27(1):7-13. [Link](#)
287. Becker P, Furie R, Mitrane M, Zhao E. Repository Corticotropin Injection (RCI) attenuates disease activity in patients with persistently active systemic lupus erythematosus (SLE) requiring corticosteroids: results from a 44-week open-label extension study [EULAR abstract THU0307]. *Ann Rheum Dis.* 2016;75(suppl 2):298-299.
288. Brown AN. Adrenocorticotrophic hormone gel in patients with refractory rheumatoid arthritis: A case series. *Int J Clin Rheumatol.* 2015;10(6):391-398.
289. Brown AN. Repository corticotropin injection in patients with refractory psoriatic arthritis: A case series. *Open Access Rheumatol.* 2016;8(1179-156X):97-102. [Link](#)
290. Carey RA., Harvey AM, Howard JE. The effect of adrenocorticotrophic hormone (ACTH) and cortisone on the course of disseminated lupus erythematosus and peri-arteritis nodosa. *Bull Johns Hopkins Hosp.* 1950;87(5):425-460. [Link](#)
291. Carter ME, James VH. Effect of corticotrophin therapy on pituitary-adrenal function. *Ann Rheum Dis.* 1970;29(1):73-80. [Link](#)
292. Clark WS, Tønning HO, Kulka JP, Bauer W. Observations on the use of cortisone and ACTH in rheumatoid arthritis. *N Engl J Med.* 1953;249(16):635-642. [Link](#)
293. Daly JR, Fletcher MR, Glass D, Chambers DJ, Bitensky L, Chayen J. Comparison of effects of long-term corticotrophin and corticosteroid treatment on responses of plasma growth hormone, ACTH, and corticosteroid to hypoglycaemia. *Br Med J.* 1974;2(5918):521-524. [Link](#)
294. Decker D, Furie R, Li D, Mathura E, Becker PM. Plasma Soluble Vascular Adhesion Molecule-1 (sVCAM-1) as an exploratory marker of response to therapy in patients with persistently active systemic lupus erythematosus (SLE), [Int Congress SLE P4.25] *Clin Exp Rheum.* 2015;33(3 suppl 90): S34
295. Donnelly P, Cooke D. A study of the combined effect of ACTH(gel) and D-penicillamine on the functional disability of patients with rheumatoid disease. *J Rheumatol.* 1982;9(6):867-872. [Link](#)
296. Fernandez AP. Interim results of an open-label study assessing efficacy and safety of H.P. Acthar Gel for the treatment of refractory cutaneous manifestations of dermatomyositis [RDS abstract]. Abstract presented at the Rheumatologic Dermatology Society Annual Meeting 2016, November 12, 2016, Washington, DC.
297. Fernandez A. Interim results of an open-label study assessing efficacy and safety of adrenocorticotrophic hormone gel for treatment of refractory cutaneous manifestations of dermatomyositis [ACR abstract 2287]. *Arthritis Rheumatol.* 2018;70(S9):2520-2521.
298. Fernandez A. Preliminary results of an open-label study assessing efficacy and safety of repository corticotropin injection for treatment of refractory cutaneous manifestations of dermatomyositis [AAD abstract 16000]. *J Am Acad Dermatol.* 2020;83(6 Supplement):AB52.
299. Fleischmann R, Connolly-Strong E, Liu J, Zhu J, Segurado O, Furst D, Goel N. Discrepancy between the multi-biomarker disease activity score and clinical disease activity scores in the open-label period of a 2 part multicenter study of Repository Corticotropin Injection for patients with persistently active rheumatoid arthritis [CCR abstract]. *Abstract presented at Congress of Clinical Rheumatology - East, September 5-8, 2020 Destin, FL.* September 2020.
300. Fleischmann R, Furst DE, Wan GJ, Panaccio MP, Liu J, Zhu J, Brasington R. Efficacy and patient-reported outcome measures from a two-part multicenter, placebo-controlled, randomized withdrawal trial of repository corticotropin injection for persistently active rheumatoid arthritis [CCR abstract]. *Abstract Presented at Congress of Clinical Rheumatology (CCR) West 2020, October 8-11, 2020 Virtual Congress,* <https://www.ccrheumatology.com/>. October 2020:229-235.
301. Fleischmann R, Jingyu L, Zhu J, Segurado O, Furst D. Discrepancy between the multi-biomarker disease activity score and clinical disease activity scores in a 2-part, multicenter study of repository corticotropin injection (Acthar Gel) for patients with persistently active rheumatoid arthritis [ACR abstract 1213]. *Arthritis Rheumatol.* 2020;72(suppl):1213.

302. Fleischmann R, Liu J, Zhu J, Segurado O, Furst D. Discrepancy between the multi-biomarker disease activity score and clinical disease activity scores in the open-label period of a 2-part, multicenter study of repository corticotropin injection for patients with persistently active rheumatoid arthritis [CCR abstract]. *Abstract Presented at Congress of Clinical Rheumatology (CCR) West 2020, October 8-11, 2020 Virtual Congress*, <https://www.ccrheumatology.com/>. October 2020:252-254.
303. Fleischmann R, Liu J, Zhu J, Segurado OG, Furst DE. Discrepancy between multi-biomarker disease activity and clinical disease activity scores in patients with persistently active rheumatoid arthritis. *Arthritis Care Res (Hoboken)*. 2021;[published online: February 28, 2021] [Link](#)
304. Fiechtner JJ, Montroy T, June J, Huyhn-Duc J. A single-site, investigator-initiated, open-label trial of the adrenocorticotrophic hormone analog H.P. Acthar Gel (repository corticotropin injection) among subjects with active systemic lupus erythematosus [Int Congress SLE abstract P4.20] *Clin Exp Rheum*. 2015;33(3 Suppl 90): S32
305. Fiechtner JJ, Montroy T. Treatment of moderately to severely active systemic lupus erythematosus with adrenocorticotrophic hormone: a single-site, open-label trial. *Lupus*. 2014;23(9):905-912. [Link](#)
306. Fischer PA, Rapoport RJ. Repository corticotropin injection in patients with rheumatoid arthritis resistant to biologic therapies. *Open Access Rheumatology*. 2018;10:13-19. [Link](#)
307. Fischer P, Rapoport R. Treatment refractory rheumatoid arthritis: is repository corticotropin injection (RCI) an effective option in patients resistant to biologic therapies? (A pilot study). [ECR abstract AB0397] *Ann Rheum Dis*. 2016;75(suppl 2):1041-1041.
308. Fiechtner J, Montroy T. Six months' treatment of moderately to severely active systemic lupus erythematosus with Repository Corticotropin injection: An extension of a single-site, open-label trial. *J Immunol Clin Res*. 2016;3(1):1025.
309. Fiechtner JJ, Montroy T, June J. A single-site, investigator initiated open-label trial of H.P. Acthar® Gel (repository corticotropin injection) an adrenocorticotrophic hormone (ACTH) analogue in subjects with moderately to severely active psoriatic arthritis (PsA). *J Dermatol Res Ther*. 2016;2(5):037.
310. Fleischmann R, Furst D, Wan G, Panaccio M, Liu J, Zhu J, Brasington R. Efficacy and patient-reported outcome measures from a two-part multicenter, placebo-controlled, randomized withdrawal trial of repository corticotropin injection for persistently active rheumatoid arthritis [EULAR abstract FRI0122]. *Ann Rheum Dis*. 2020;79(suppl 1):638.
311. Fleischmann R, Furst DE. Safety of repository corticotropin injection as an adjunctive therapy for the treatment of rheumatoid arthritis. *Expert Opin Drug Saf*. 2020; 19(8):935-944. [Link](#)
312. Fleischmann R, Connolly-Strong E, Liu J, Zhu J, Segurado O, Furst D. Discrepancy between the multi-biomarker disease activity score and clinical disease activity scores in the open-label period of a 2 part, multicenter study of repository corticotropin injection for patients with persistently active rheumatoid arthritis [CRA abstract 166]. *Abstract presented at Canadian Rheumatology Association*, February 26-29, 2020, Victoria, BC, CA. 2020.
313. Fleischmann R, Connolly-Strong E, Liu J, Zhu J, Segurado O, Furst D. Efficacy and safety of repository corticotropin injection in patients with persistently active rheumatoid arthritis: results from a 2-part multicenter clinical trial [CRA abstract 165]. *Abstract presented at Canadian Rheumatology Association*, February 26-29, 2020, Victoria, BC, CA. 2020.
314. Fleischmann R, Furst D, Connolly-Strong E, Liu J, Zhu J, Brasington R. Assessment of bone and cartilage turnover markers following treatment with repository corticotropin injection in patients with persistently active rheumatoid arthritis [ACR abstract 528]. *Arthritis Rheumatol*. 2019;71(suppl 10):895-897.
315. Fleischmann R, Furst DE, Brasington R, Connolly-Strong E, Liu J, Barton ME. A multicenter study assessing the efficacy and safety of repository corticotropin injection in patients with rheumatoid arthritis: preliminary interim data from the open-label treatment period [EULAR abstract SAT0248] *Ann Rheum Dis*. 2018;77:986.
316. Fleischmann R, Furst DE, Brasington R, Connolly-Strong E, Liu J, Barton M, Geffen D. A multicenter study assessing the efficacy and safety of repository corticotropin injection in patients with rheumatoid arthritis: preliminary interim data from the open-label treatment period [ACR abstract 2528]. *Arthritis Rheumatol*. 2018;70(S9):2802.

317. Fleischmann R, Furst D, Jingyu L, Zhu J, Connolly-Strong E, Brasington R. A multicentre study assessing the efficacy and safety of repository corticotropin injection in patients with persistently active rheumatoid arthritis [EULAR abstract THU0170]. *Ann Rheum Dis*. 2019;78(suppl 2):A359.
318. Fleischmann R, Furst DE, Connolly-Strong E, Liu J, Zhu J, Brasington R. Repository corticotropin injection for active rheumatoid arthritis despite aggressive treatment: a randomized controlled withdrawal trial. *Rheumatol Ther*. 2020;7(2):327-34. [Link](#)
319. Friedman M, Marshall-Jones P, Ross EJ. Cushing's syndrome: Adrenocortical hyperactivity secondary to neoplasms arising outside the pituitary-adrenal system. *Q J Med*. 1966;35(138):193-214. [Link](#)
320. Furie RA, Mitrane M, Zhao E, Becker PM. Repository corticotropin injection in patients with persistently active SLE requiring corticosteroids: post hoc analysis of results from a two-part, 52-week pilot study. *Lupus Sci Med*. 2017;4(1):e000240. [Link](#)
321. Furie RA, Mitrane M, Zhao E, Becker P. Measures of disease activity in patients with persistently active systemic lupus erythematosus (SLE): results from a two-part 52 week pilot study of repository corticotropin injection (H.P. Acthar Gel) [ACR Abstract 757]. 2016;68(suppl 10):1009-1010.
322. Furie R, Das M, Li D, Coffie J, Smythe S, Mathura E, Becker, PM. H.P. Acthar Gel (Acthar) attenuates disease activity in patients with persistently active systemic lupus erythematosus (SLE) requiring corticosteroids. [Int Congress SLE P4.13]. *Clin Exp Rheum*. 2015;33(3 suppl 90): S31.
323. Furie R, Das M, Li D, Smythe S, Mathura E, Becker P. Repository corticotropin injection (H.P. Acthar® Gel) attenuates disease activity in patients with persistently active systemic lupus erythematosus (SLE) requiring corticosteroids [ACR abstract 727]. *Arthritis Rheumatol*. 2015; 67 (suppl 10).
324. Furie R, Mitrane M, Zhao E, Das M, Li D, Becker PM. Efficacy and tolerability of repository corticotropin injection in patients with persistently active SLE: results of a phase 4, randomised, controlled pilot study. *Lupus Sci Med*. 2016;3(1):e000180. [Link](#)
325. Gaylis NB, Needell S, Sagliani J. The effect of adrenocorticotropin gel (HP Acthar Gel) in combination with MTX in newly diagnosed RA patients from a clinical and structural perspective [ACR/ARHP abstract 2732]. *Arthritis Rheumatol*. 2015;67(suppl 10).
326. Gaylis N, Needell S, Sagliani J. The effect of corticotropin (ACTH 80 units weekly or biweekly) in combination with MTX in newly diagnosed RA patients from a clinical and structural perspective as measured by a CDAI score and osteitis, synovitis, and erosions on MRI [EULAR abstract AB0503]. *Ann Rheum Dis*. 2015;74(suppl 2):1066-1067
327. Gillhespy RO. The evaluation of long-acting ACTH in the treatment of chronic rheumatoid arthritis. *Br J Clin Pract*. 1963;17:721-723. [Link](#)
328. Gillis TM, Crane M, Hinkle C, Wei N. H.P. Acthar® Gel (repository corticotropin injection) as adjunctive therapy in patients with rheumatoid arthritis who have failed at least three biologic therapies with different modes of action [EULAR abstract AB0502]. *Ann Rheum Dis*. 2015;74(suppl 2):1066-1066
329. Gillis T, Crane M, Hinkle C, Wei N. Repository corticotropin injection as adjunctive therapy in patients with rheumatoid arthritis who have failed previous therapies with at least three different modes of action. *Open Access Rheumatol*. 2017;9:131-138.
330. Glass D, Daly JR. Development of antibodies during long-term therapy with corticotrophin in rheumatoid arthritis. I. porcine ACTH. *Ann Rheum Dis*. 1971;30(6):589-592. [Link](#)
331. Hench PS, Kendall EC, Slocumb CH, Polley HF. Effects of cortisone acetate and pituitary ACTH on rheumatoid arthritis, rheumatic fever and certain other conditions. *Arch Intern Med*. 1950;85(4):545-666. [Link](#)
332. Levine T, Malone J, Efthimiou P, Rup T. HP Acthar® Gel in dermatomyositis and polymyositis treatment registry: an interim analysis. *J Neurol Disord*. 2016;4(5):292 1-6.
333. Levine T. Acthar in dermatomyositis and polymyositis treatment registry: An interim analysis.[AAN abstract P7.065]. *Neurology*. 2015;84(suppl 14):P7.065
334. Levine T. Treating refractory dermatomyositis or polymyositis with adrenocorticotrophic hormone gel: A retrospective case series. *Drug Des Devel Ther*. 2012;6:133-139. [Link](#)

335. Li X, Golubovsky J, Hui-Yuen J, et al. Adrenocorticotrophic hormone gel in the treatment of systemic lupus erythematosus: A retrospective study of patients. [version 2]. *F1000Res*. 2015;4(1103):1103. [Link](#)
336. Madan E, Garber C, Saraiya A, Gottlieb AB. Assessment of the use of adrenocorticotrophic hormone in psoriatic arthritis. *Journal of Psoriasis and Psoriatic Arthritis*. 2015;1(1):52-58
337. Mathias DW. Scleromalacia perforans associated with retinitis pigmentosa and rheumatoid arthritis; report of a case. *Am J Ophthalmol*. 1955;39(2 Pt 1):161-166. [Link](#)
338. Meliambro K, Sharma S, Campbell KN. Treatment-refractory FSGS in a patient with systemic lupus erythematosus [ASN abstract FR-PO649]. *J Am Soc Nephrol*. 2014;25(suppl):206A.
339. Nelson JK, Mackay JS, Sheridan B, Weaver JA. Intermittent therapy with corticotrophin. *Lancet*. 1966;2(7454):78-83. [Link](#)
340. Patel A, Pender TM, Rosenkran M. Efficacy of adrenocorticotrophic hormone gel (Acthar) in refractory juvenile dermatomyositis [GCOM abstract P49]. *BMC Rheumatol*. 2019;3(suppl 1):19-20.
341. Patel A, Seely G, Aggarwal R. Repository corticotropin injection for treatment of idiopathic inflammatory myopathies. *Case Rep Rheumatol*. 2016;2016(9068061):1-4.
342. Pegram SB. The efficacy and tolerability of H.P. Acthar® Gel (repository corticotropin injection) for the treatment of systemic lupus erythematosus [EULAR abstract AB0531]. *Ann Rheum Dis*. 2015;74(suppl 2):1077-1078
343. Pender TM, Patel AM, Rosenkranz ME. Efficacy of repository-corticotropin injection (Acthar) in refractory juvenile dermatomyositis: a case series. *J Clin Rheumatol*. 2020;[published online: June 4, 2020]. [Link](#)
344. Saygin D, Marder G, Oddis CV, Moghadam-Kia S, Nandkumar P, Qui Z, Koontz D, Aggarwal R. Long term follow-up results of myositis patients treated with H. P. Acthar Gel [ACR abstract 2290]. *Arthritis Rheumatol*. 2018;70(S9):2524.
345. Saygin D, Oddis CV, Marder G, Moghadam-Kia S, Nandkumar P, Neiman N, Dzanko S, Koontz D, Aggarwal R. Follow-up results of myositis patients treated with H. P. Acthar gel. *Rheumatology (Oxford)*. 2020;59(10):2976-2981 [Link](#).
346. Saygin D, Biswas P, Nouraei S, Moghadam-Kia S, McGeachy M, Oddis C, Dzanko S, Koontz D, Ascherman D, Aggarwal R. Serum cytokine profiles of patients with adult idiopathic inflammatory myopathy [ACR Convergence abstract 0691]. *Arthritis Rheumatol*. 2021;73(suppl 9):1401-1402.
347. Saygin D, Biswas PS, Oddis C, Moghadam-Kia S, Dzanko S, Koontz D, Ascherman D, Aggarwal R. Serum cytokine profiles of patients with adult idiopathic inflammatory myopathies [ACR RRW abstract]. *Abstract presented at Rheumatology Research Workshop*. May 14-15, 2021 Virtual meeting. 2021.
348. Savage O, Davis PS, Chapman L, Wickings J, Robertson JD, Copeman WSC. Corticotrophin (ACTH) in rheumatoid arthritis. *Ann Rheum Dis*. 1959;18:100-110. [Link](#)
349. Talbott JH, Koepf GF, Culver GJ, Terplan K. Dermatomyositis, disseminated calcinosis and metaplastic ossification--clinical studies over a period of 7 years in a female with rheumatoid arthritis. *Arthritis Rheum*. 1959;2:499-512. [Link](#)
350. Wedgwood RJ, Janeway CA. Serum complement in children with collagen diseases. *Pediatrics*. 1953;11(6):569-581. [Link](#)
351. West HF. Purified ACTH gel control of therapy in rheumatoid patients. *Ann Rheum Dis*. 1954;13(1):56-58. [Link](#)
352. West HF, Newns GR. Allergy to bovine ACTH (adrenocorticotrophic hormone). *Lancet*. 1952;262:1308.
353. Wolff M, Mancuso C, Lal K, Dicostanzo D, Gropper C. Paraneoplastic dermatomyositis with cutaneous and myopathic disease responsive to adrenocorticotrophic hormone therapy. *J Clin Aesthet Dermatol*. 2017;10(1):57-62. [Link](#)
354. Wu A, June J. Case series: Comparison of repository corticotropin injection (H.P. Acthar Gel) versus glucocorticoids on bone density in SLE patients [ACR abstract 331]. *Arthritis Rheumatol*. 2017;69(suppl 10): 452
355. Zutshi DW, Friedman M, Ansell BM. Corticotrophin therapy in juvenile chronic polyarthritis (still's disease) and effect on growth. *Arch Dis Child*. 1971;46(249):584-593. [Link](#)

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356. Bartels-Peculis L, Sharma A, Edwards AM, Sanyal A, Connolly-Strong E, Nelson WW. Treatment patterns and health care costs of lupus nephritis in a United States payer population. *Open Access Rheumatol.* 2020;12:117-124. [Link](#)
357. Bindra J, Chopra I, Niewoehner J, Panaccio M, Wan GJ. Cost-effectiveness of repository corticotropin injection versus standard of care for the treatment of active rheumatoid arthritis. *Clinicoecon Outcomes Res.* 2021;13:349-358. [Link](#)
358. Christopher-Stine L, Kelly W, Wan G, Kobert L, Reed M. Polymyositis (PM) and dermatomyositis (DM) symptom flares and associated impact from the patient perspective [ACR abstract 2245]. *Arthritis Rheumatol.* 2019;71(suppl 10):3493-3945.
359. Christopher-Stine L, Wan GJ, Kelly W, McGowan M, Bostic R, Reed ML. Patient-reported dermatomyositis and polymyositis flare symptoms are associated with disability, productivity loss, and health care resource use. *J Manag Care Spec Pharm.* 2020 Nov;26(11):1424-1433. [Link](#)
360. Furst D, Wan G, Liu J, Zhu J, Bartels-Peculis L, Panaccio M, Fleischmann R. Improved patient-reported outcomes in patients with persistently active rheumatoid arthritis following treatment with repository corticotropin injection [ACR abstract 439]. *Arthritis Rheumatol.* 2019;71(suppl 10):725-727
361. Hayes K, Panaccio M, Zhou H, Fahim M. Determinants of repository corticotropin injection treatment initiation for patients with rheumatoid arthritis in a large claims database [EULAR abstract AB1166]. *Ann Rheum Dis.* 2020;79(suppl 1):1873-1874.
362. Hayes K, Panaccio MP, Goel N, Fahim M. Patient characteristics and indicators of treatment initiation with repository corticotropin injection in patients with rheumatoid arthritis: a claims database analysis. *Rheumatol Ther.* 2021;8(1):327-346. [Link](#)
363. Hayes K, Panaccio MP, Houston P, Niewoehner J, Fahim M, Wan GJ, Dhillon B. Real-world treatment patterns and outcomes from an electronic medical records database for patients with rheumatoid arthritis treated with repository corticotropin injection. *Open Access Rheumatol.* 2021;13:315-323. [Link](#)
364. Ho-Mahler N, Turner B, Eaddy M, Hanke M, Nelson W. Treatment with repository corticotropin injection in patients with rheumatoid arthritis, systemic lupus erythematosus, and dermatomyositis/polymyositis. *Open Access Rheumatol.* 2020;12:21-28.
365. Katz P, Wan GJ, Daly P, Topf L, Connolly-Strong E, Bostic R, Reed ML. Patient-reported flare frequency is associated with diminished quality of life and family role functioning in systemic lupus erythematosus. *Qual Life Res.* 2020; 29(12):3251-3261. [Link](#)
366. Katz P, Nelson WW, Daly RP, Topf L, Connolly-Strong E, Reed ML. Patient-reported lupus flare symptoms are associated with worsened patient outcomes and increased economic burden. *J Manag Care Spec Pharm.* 2020;26(3):275-283. [Link](#)
367. Knight T, Bond C, Popelar B, Wang L, Philbin M. Medical resource utilization in dermatomyositis/polymyositis patients treated with repository corticotropin injection, intravenous immunoglobulin, and/or rituximab [ASHP abstract 36-M] . Abstract presented at the American Society of Health-Systems Pharmacists Summer Meeting and Exhibition 2016; June 11-15, 2016; Baltimore, MD: 706.
368. Knight T, Bond TC, Popelar B, Wang L, Niewoehner JW, Anastassopoulos K, Philbin M. Medical resource utilization in dermatomyositis/polymyositis patients treated with repository corticotropin injection, intravenous immunoglobulin, and/or rituximab. *Clinicoecon Outcomes Res.* 2017;9:271-279 [Link](#)
369. Mahmoud TG, Huang J, Frits M, Iannaccone C, Bykerk V, Bingham CO 3rd, Weinblatt M, Shadick NA. Correlates of successful rheumatoid arthritis flare management: clinician-driven treatment, home-based strategies, & medication change. *J Rheumatol.* 2020;47(3):333-340. [Link](#)
370. Myung G, Nelson W, McMahon MA. Effects of repository corticotropin injection on medication use in patients with rheumatologic conditions: a claims data study [ACR abstract 2236]. *Arthritis Rheumatol.* 2016;68(suppl 10):2895-2897.
371. Myung GMD, Nelson WW, PMSMBA, McMahon MAMD. Effects of repository corticotropin injection on medication use in patients with rheumatologic conditions: a claims data study. *J Pharm Technol.* 2017;33(4):151-155.

372. Nelson WW, Philbin MJ, Gallagher JR, Heap K, Carroll S, Wan GJ. A retrospective medical record review of utilization patterns and medical resource use associated with repository corticotropin injection among patients with rheumatologic diseases in the United States. *Rheumatol Ther*. 2017;4(2):465-474. [Link](#)
373. Nelson W, Katz P, Daly RP, Topf L, Connolly-Strong E, Reed M. Lupus flare activity from the patient perspective [ACR abstract 2912]. *Arthritis Rheumatol*. 2018;70(S9):3273-3275
374. Rice JB, White A, Galebach P, Lopez A, Schepman P, Popelar B, Philbin M, Boing E. The economic burden of dermatomyositis and polymyositis in the US [ACR Abstract 1237]. *Arthritis Rheumatol*. 2016;68(suppl 10):1568-1569.
375. Rice BJ, White A, Lopez A, P, Schepman P, Popelar B, Philbin M. Healthcare resource utilization and work loss in dermatomyositis and polymyositis patients in a privately-insured US population. *J Med Econ*. 2016:1-6. [Link](#)
376. Rice J, White A, Lopez A, Galebach P, Schepman P, Popelar B, Philbin M. Healthcare resource utilization and work loss in dermatomyositis and polymyositis patients in a privately insured population in the United States [AMCP abstract M14]. *J Managed Care Spec Pharm*. 2015; 21(suppl 10-a):S71.
377. Wu B, Deshpande G, Gu T, Popelar B, Philbin M, Wan GJ. Demographics, treatment patterns, and healthcare utilization and cost of repository corticotropin injection in patients with systemic lupus erythematosus or rheumatoid arthritis. *J Med Econ*. 2017;20(11):1170-1177. [Link](#)
378. Wu B, Deshpande G, Popelar B, Wan G, Philbin M. Real-world treatment patterns and demographic, clinical and economic characteristics of rheumatoid arthritis patients initiating repository corticotropin injection therapy [a]. Abstract presented at the American Society of Health-Systems Pharmacists Summer Meeting and Exhibition 2016; June 11-15, 2016; Baltimore, MD: 2016
379. Wu B, Deshpande G, Tunceli O, Gu T, Popelar B, Philbin M, Damal K, Schepman P, Wan G I. Real-world treatment patterns and demographic, clinical, and economic characteristics of systemic lupus erythematosus (SLE) patients initiating repository corticotropin injection therapy [AMCP abstract M17]. *J Managed Care Spec Pharm*. 2016;22(suppl 4-a):S107

Other

380. Aber GM, Chandler GN, Hartfall SJ. Cortisone and A.C.T.H. in treatment of non-rheumatic conditions. *Br Med J*. 1954;1(4852):1-8. [Link](#)
381. Adler GK, Kinsley BT, Hurwitz S, Mossey CJ, Goldenberg DL. Reduced hypothalamic-pituitary and sympathoadrenal responses to hypoglycemia in women with fibromyalgia syndrome. *Am J Med*. 1999;106(5):534-543. [Link](#)
382. Appel GB, Appel AS. New diagnostic tests and new therapies for glomerular diseases. *Blood Purif*. 2013;35:81-85. [Link](#)
383. Arnason BG, Berkovich R, Catania A, Lisak RP, Zaidi M. Mechanisms of action of adrenocorticotrophic hormone and other melanocortins relevant to the clinical management of patients with multiple sclerosis. *Mult Scler*. 2013;19:130-136. [Link](#)
384. Arrat H, Lukas TJ, Siddique T. ACTH (Acthar Gel) reduces toxic SOD1 protein linked to amyotrophic lateral sclerosis in transgenic mice: A novel observation. *PLoS One*. 2015;10(5):e0125638. [Link](#)
385. Arya R, Shinnar S, Glauser TA. Corticosteroids for the treatment of infantile spasms: A systematic review. *J Child Neurol*. 2012;27(10):1284-1288. [Link](#)
386. Avelar TN, Hever A, Batech M, et al. Distribution of primary glomerulonephropathies among hispanics [ASN abstract SA-PO839]. *J Am Soc Nephrol*. 2014;25(suppl):831A
387. Baram TZ. What are the reasons for the strikingly different approaches to the use of ACTH in infants with West Syndrome? *Brain and Development*. 2001;7:647-648. [Link](#)
388. Baughman RP, Rahaghi FF, Sakekoo LA, Scholand MB, Sweiss N. Treatment recommendations for sarcoidosis: results of a Delphi consensus study. [ATS abstract 223] *Am J Respir Crit Care Med*. 2018;197:A4274.
389. Baughman RP, Scholand MB, Rahaghi FF. Clinical phenotyping: role in treatment decisions in sarcoidosis. *Eur Respir Rev*. 2020;29(155). [Link](#).

390. Beaulieu D, Cuervo J, Taylor AA, VanMeter S, Zhao E, Keymer M, Ennist DL. Estimate of an Acthar gel treatment effect in ALS patients using virtual controls [ALS/MND abstract CLT-27]. *Amyotroph Lateral Scler Frontotemporal Degener.* 2019;20(suppl 1):278.
391. Benko AL, Wright AD, Sunyer T, Olsen NJ, Kovacs WJ. Individual pituitary neuropeptides do not recapitulate the effects of repository corticotropin (Acthar®) on human B cells in vitro. *J Neuroimmunol.* 2021;353:577522. [Link](#)
392. Benjamins JA, Nedelkoska L, Lisak RP. Melanocortin receptor subtypes are expressed on cells in the oligodendroglial lineage and signal ACTH protection. *J Neurosci Res.* 2018;96(3):427-435. [Link](#)
393. Benke T, Geiger E, Yu H-C, Eschbach K, Shaikh T, Demarest S. Whole Exome Sequencing (WES) in 21 patients with infantile spasms [AES abstract 3.402]. Abstract presented at the American Epilepsy Society Annual Meeting 2018, November 30 - December 4, New Orleans, LA . November 2018.
394. Benko AL, Mcaloose CA., Becker PM, Wright D, Sunyer T, Kawasawa YI, Olsen NJ, Kovacs WJ. Repository corticotrophin injection exerts direct acute effects on human B cell gene expression distinct from the actions of glucocorticoids. *Clin Exp Immunol. Clin Exp Immunol.* 2018;192(1):68-81. [Link](#)
395. Bergwall L, Elvin J, Wallentin HI, Haraldsson B, Nystrom JC, Buvall L. Unbiased Phosphoproteomic Approach Identifies Podocyte Protective Pathways Downstream the Melanocortin-1 Receptor [ASN abstract TH-PO238]. *J Am Soc Nephrol.* 2016;27(suppl):148A.
396. Berkovich R. Experience of using adrenocorticotrophic hormone in the treatment of patients with acute neuromyelitis optica who failed systemic steroids: a case series. *Clin Neuropharmacol.* 2020;43(1):7-14. [Link](#)
397. Berkovich RR. Acute Multiple Sclerosis Relapse. *Continuum (Minneap Minn).* 2016;22(3):799-814. [Link](#)
398. Berkovich R, Agius MA. Mechanisms of action of ACTH in the management of relapsing forms of multiple sclerosis. *Ther Adv Neurol Disord.* 2014;7(2):83-96. [Link](#)
399. Berkovich R. Treatment of acute relapses in multiple sclerosis. *Neurotherapeutics.* 2013;10(1):97-105. [Link](#)
400. Berkovich R, Amezcua L, Subhani D, Cen S. Pilot study of monthly pulse adrenocorticotrophic hormone (ACTH) or methylprednisolone as an add-on therapy to beta-interferons for long-term treatment of multiple sclerosis [AAN abstract]. *Neurology.* 2013;80:e205-e206
401. Berkovich R, Amezcua L, Fernandez M, Subhani D, Kravtsova I. Monthly pulse adrenocorticotrophic hormone (ACTH) or methylprednisolone therapy for long-term treatment of multiple sclerosis as an add-on therapy to beta-interferons: Current status of the pilot study [AAN abstract P04.147]. *Neurology.* 2012;78(suppl 1):22-P04.147
402. Besser GM, Butler PW, Plumpton FS. Adrenocorticotrophic action of long-acting tetracosactrin compared with corticotrophin-gel. *BMJ.* 1967;4(5576):391-394. [Link](#)
403. Bomback AS, Jai R, James EB, et al. The treatment of resistant nephrotic syndrome with Acthar Gel (ACTH) [ASN abstract SA-FC409]. *J Am Soc Nephrol.* 2010;21(suppl):93A
404. Bomback AS, Radhakrishnan, J, Pietro AC, Gerald BA. Treatment of resistant glomerular diseases with ACTH gel: A prospective trial [ASN SA-PO2471]. *J Am Soc Nephrol.* 2011;22(suppl):776A-777A
405. Bomback AS, Radhakrishnan J. Treatment of nephrotic syndrome with adrenocorticotrophic hormone (ACTH). *Discov Med.* 2011;12(63):91-96. [Link](#)
406. Bomback AS, Fervenza FC. Membranous nephropathy: approaches to treatment. *Am J Nephrol.* 2018;47(suppl 1):30-42. [Link](#)
407. Bonkowsky JL, Filloux FM, Byington CL. Herpes simplex virus central nervous system relapse during treatment of infantile spasms with corticotropin. *Pediatrics.* 2006;117(5):e1045-e1048. [Link](#)
408. Brod SA, Hood ZM. Ingested (oral) ACTH inhibits EAE. *J Neuroimmunol.* 2011;232(1-2):131-135. [Link](#)
409. Brod SA, Morales MM. Bio-equivalence of IM and SQ H.P. Acthar Gel. *Biomed Pharmacother.* 2009;63:251-253. [Link](#)

410. Brod SA, Bauer V, Hood Z. Oral ACTH (H.P. Acthar Gel) inhibits IL-1 and IL-17 secretion in humans. *Biomed Pharmacother.* 2012;66(1):36-39. [Link](#)
411. Brunson KL, Khan N, Eghbal-Ahmadi M, Baram TZ. Corticotropin (ACTH) acts directly on amygdala neurons to down-regulate corticotropin-releasing hormone gene expression. *Ann Neurol.* 2001;49(3):304-312. [Link](#)
412. Cady R, Mechtler L, McAllister P, Rothrock J, Manley H, Cady R. A randomized, open-label, parallel two-arm study evaluating the efficacy of H.P. Acthar injection gel in the treatment of adults with treatment resistant chronic migraine [AAN abstract P2.210]. *Neurology.* 2016;86(suppl 16):P2.210.
413. Campbell KN, Tumlin JA. Protecting podocytes: a key target for therapy of focal segmental glomerulosclerosis. *Am J Nephrol.* 2018;47(suppl 1):14-29. [Link](#)
414. Cape CA, Arbona NJ. Correlation of the clinical response to ACTH treatment with the endocrine status in myasthenia gravis. *South Med J.* 1973;66(9):1011-101. [Link](#)
415. Cavallari M, Palotai M, Prieto JC, Healy BC, Egorova S, Polgar-Turcsanyi M, Anderson M, Glanz B, Chitnis T, Guttmann CRG. Fatigue predicts conversion to secondary progressive disease phenotype in relapsing-remitting multiple sclerosis patients [ECTRIMS abstract P922]. *Mult Scler.* 2015; 23(suppl 11): 46
416. Chen B, Guan X, Dworkin L, Gong R. MC1R signaling protects against experimental membranous nephropathy and mediates the beneficial effect of melanocortin therapy via regulation of humoral immune responses [ISN abstract POS-453]. *Kidney Int Rep.* 2021;6(4 suppl):S196-S197.
417. Cheng B, Chou SC, Abraham S, Kowal J. Effects of prolonged ACTH-stimulation on adrenocortical cholesterol reserve and apolipoprotein E concentration in young and aged Fischer 344 male rats. *J Steroid Biochem Mol Biol.* 1998;66(5-6):335-345. [Link](#)
418. Chern C, Chern C, Velíšková J, Velíšek L. ACTON PROLONGATUM® suppresses spasms head to head with Acthar® Gel in the model of infantile spasms. *Epilepsy Behav.* 2020;105:106950:1-7. [Link](#)
419. Christopher-Stine L, Nelson W, Kelly W, Kobert L, Opong-Owusu B, Reed M. Polymyositis (PM) and dermatomyositis (DM) symptom flares and associated impact from the patient perspective. [GCOM abstract P17]. *Abstract presented at 3rd Global conference on Myositis March 27-30, 2019, Berlin Germany.* 2019.
420. Clemson CM, Yost J, Taylor AW. The role of alpha-MSH as a modulator of ocular immunobiology exemplifies mechanistic differences between melanocortins and steroids. *Ocul Immunol Inflamm.* 2016:1-11. [Link](#)
421. Chu DT, Rosso M, Gonzalez CT, Saxena S, Healy BC, Weiner HL, Chitnis T. Obesity is associated with the optic neuritis severity in male patients with multiple sclerosis. *Mult Scler Relat Disord.* 2021;51:102910. [Link](#).
422. Crane AB, Sharon Y, Chu DS. Use of adrenocorticotrophic hormone in ophthalmology. *J Ocul Pharmacol Ther.* 2020;36(9):661-667. [Link](#).
423. Cravedi P, Campbell KN. ACTH action on podocytes: Mystery solved? *Am J Physiol Renal Physiol.* 2016;310(11):F1178-F1179. [Link](#)
424. Cusick MF, Libbey JE, Oh L, Jordan S, Fujinami RS. Acthar Gel treatment suppresses acute exacerbations in a murine model of relapsing-remitting multiple sclerosis. *Autoimmunity.* 2015;48(4):222-230. [Link](#)
425. Decker D, Grant C, Oh L, Becker P, Young D, Jordan S. Immunomodulatory effects of H.P. Acthar Gel on B cell development in the NZB/W F1 mouse model of systemic lupus erythematosus. *Lupus.* 2014;23:802-812. [Link](#)
426. Decker D, Higgins P, Bendele A, Becker P. Repository corticotropin injection (H.P. Acthar® Gel) attenuates established collagen-induced arthritis when used alone or as adjuvant therapy with Etanercept (Enbrel®) [AAI abstract THER5P.902]. *J Immunol.* 2015;194(suppl 1):139.4-139.4
427. Decker DA, Higgins P, Hayes K, Bollinger C, Becker P, Wright D. Repository corticotropin injection attenuates collagen-induced arthritic joint structural damage and has enhanced effects in combination with etanercept. *BMC Musculoskelet Disord.* 2020;21(1):586. [Link](#)
428. Denburg MR, Razzaghi H, Bailey LC, Soranno DE, Pollack AH, Dharnidharka VR, Mitsnefes MM, Smoyer WE, Somers MJG, Zaritsky JJ, Flynn JT, Claes DJ, Dixon BP, Benton M,

- Mariani LH, Forrest CB, Furth SL. Using electronic health record data to rapidly identify children with glomerular disease for clinical research. *J Am Soc Nephrol.* 2019;30(12):2427-2435. [Link](#)
429. Dunagan DP, Rubin BK, Fasano MB. Pneumocystis carinii pneumonia in a child receiving ACTH for infantile spasms. *Pediatr Pulmonol.* 1999;27(4):286-289. [Link](#)
430. Esen N, Hall C, Cazares A, Wright D, Dore-Duffy P. Effects of Acthar gel on central nervous system vascularization and remyelination after cuprizone induced demyelination [ACTRIMS abstract P285]. Abstract presented at ACTRIMS Forum 2020. February 27-29, 2020, West Palm Beach, FL. 2020
431. Fleischer N, Abe K, Liddle GW, Orth DN, Nicholson WE. ACTH antibodies in patients receiving depot porcine ACTH to hasten recovery from pituitary-adrenal suppression. *J Clin Invest.* 1967;46(2):196-204. [Link](#)
432. Garg P. A review of podocyte biology. *Am J Nephrol.* 2018;47(suppl 1):3-13. [Link](#)
433. Gentry PA, Liptrap RM, Tremblay RR, Lichen L, Ross ML. Adrenocorticotrophic hormone fails to alter plasma fibrinogen and fibronectin values in calves but does so in rabbits. *Vet Res Commun.* 1992;16(4):253-264. [Link](#)
434. Gitelson S. The effect of ACTH and cortisone on the blood pyruvic acid level. *Acta Endocrinol (Copenh).* 1954;15(3):225-235. [Link](#)
435. Go T. Sequential MRI in chronic meningitis during adrenocorticotrophic hormone treatment for West Syndrome. *Childs Nervous System.* 2001;17(8):497-499. [Link](#)
436. Gong R. The renaissance of corticotropin therapy in proteinuric nephropathies. *Nat Rev Nephrol.* 2012;8:122-128. [Link](#)
437. Guan X, Zhou R, Dworkin LD, Gong R. Melanocortin 1 Receptor (MC1R) deficiency exacerbates glomerular injury and proteinuria in the autologous phase of nephrotoxic serum (NTS) nephritis [ASN abstract FR-PO986]. *J Am Soc Nephrol.* 2019;30:695-696.
438. Guan X, Zhou R, Dworkin LD, Gong R. Hematopoietic-specific melanocortin 1 receptor signaling protects against crescentic glomerulonephritis and mediates the beneficial effect of melanocortin therapy [ASN abstract TH-OR41]. *J Am Soc Nephrol.* 2020;31(suppl 1):12.
439. Hayes K, Warner E, Bollinger C, Wright D, Fitch R. Repository corticotropin injection versus corticosteroids for protection against renal damage in a focal segmental glomerulosclerosis rodent model. *BMC Nephrol.* 2020;21(1):226. [Link](#).
440. Hayes K, Warner EA, Bollinger C, Wright D, Fitch RM. Differential effects of Acthar® Gel and methylprednisolone in a preclinical rodent model of FSGS [ASN abstract PUB447]. *J Am Soc Nephrol.* 2017;28(suppl):1077-1078.
441. Hayes K, Warner E, Bollinger C, Wright D, Fitch R. H.P. Acthar Gel inhibits fibrosis, renal tubular damage, and glomerular injury in 8-and 12-week puromycin induced renal injury model [NKF abstract 119]. *Am J Kidney Dis.* 2018;71(4):545.
442. Healy LM, Jang JH, Lin YH, Rao V, Antel JP, Wright D. Melanocortin receptor mediated anti-inflammatory effect of repository corticotropin injection on human monocyte derived macrophages [ECTRIMS-ACTRIMS abstract EP1481]. *Mult Scler.* 2017;23(S3):777.
443. Hladunewich MA, Fervenza FC, Beck LH., et al. A pilot study to determine dose, effectiveness and depletion of anti-PLA2R antibodies of adrenocorticotrophic hormone (ACTH Acthar Gel) in subjects with nephrotic syndrome and idiopathic membranous nephropathy (IMN) [ASN abstract FR-OR125]. *J Am Soc Nephrol.* 2012;23(suppl):58A
444. Higgins P, Decker D, Becker P. Immunomodulatory effects of repository corticotropin injection (H.P. Acthar® gel) on the MRL/lpr model of lupus [AAI abstract 210.11]. *J Immunol.* 2016;196(1 Supplement):210.11.
445. Higgins P, Decker D, Becker P. Inhibition of a streptococcal cell wall model of arthritis flare by repository corticotropin injection [EULAR abstract AB0105]. *Ann Rheum Dis.* 2016;75(Suppl 2):932-932.
446. Higgins P, Young D. Inhibitory effects of Acthar Gel in the passive Heymann nephritis model [ASN abstract FR-PO338]. *J Am Soc Nephrol.* 2014;25(suppl):448A
447. Hogan JJ, Jai R, Gerald BA, Andrew SB, Pietro AC, Maya KR. Treatment of resistant primary focal segmental glomerulosclerosis (FSGS) with adrenocorticotrophic hormone (ACTH) gel [ASN abstract SA-PO381]. *J Am Soc Nephrol.* 2012;23(suppl):725A

448. Howlett-Prieto Q, Reder A, Feng X, Houston T, Javed A. Effects of adrenocorticotrophic hormone on melanocortin receptors, regulatory immune cells, and MRI in MS [ACTRIMS-ECTRIMS abstract P0329]. *Mult Scler.* 2020;26(3 suppl):278-279.
449. Huang YJ, Galen K, Zweifel B, Brooks LR, Wright AD. Distinct binding and signaling activity of Acthar Gel compared to other melanocortin receptor agonists. *J Recept Signal Transduct Res.* 2021 Oct; 41(5): 425-433. [Link](#)
450. James WE, Baughman R. Treatment of sarcoidosis: grading the evidence. *Expert Rev Clin Pharmacol.* 2018; 18:1-11. [Link](#)
451. Jensen MA, Abraham P, Reder AT, Arnason BGW. Co-production of GM-CSF, IL-22, or IL-17F identifies a pathogenic high IL-17A-producing T cell subset from MS patients that is steroid resistant [ANA abstract S151]. *Ann Neurology.* 2016;80:S53-S54.
452. Jensen M, Reder A, Arnason B. Adrenocorticotrophic hormone (ACTH) modulates antigen presenting cell phenotype and function in multiple sclerosis [AAN abstract P02.186]. *Neurology.* 76(suppl 4):A136-A137.
453. Kater CE, Irony I, Biglieri EG, Faical S. Continuous adrenocorticotropin administration in hypopituitarism produces asynchronous increases of deoxycorticosterone and 11-deoxycortisol relative to other reduced zona fasciculata steroids. *J Clin Endocrinol Metab.* 1990;71(2):305-310. [Link](#)
454. Kittanamongkolchai W, Cheungpasitporn W, Zand L. Efficacy and safety of adrenocorticotrophic hormone treatment in glomerular diseases: A systematic review and meta-analysis. *Clin Kidney J.* 2016;9(3):387-396. [Link](#).
455. Kirkil G, Baughman RP. The current management of sarcoidosis. *Minerva Pneumol.* 2016;55(3):71-84.
456. Kongelbeck SR. Discharge planning for the child with infantile spasms. *J Neurosci Nurs.* 1990;No. 4:238-244. [Link](#)
457. Kontekakis A, Nelson W, Christopher-Stine L, Kelly W, Kobert L, Opong-Owusu B, Reed M. Inclusion body myositis (IBM) symptom flares and associated impact from the patient perspective. [GCOM abstract P122]. *Abstract presented at 3rd Global conference on Myositis March 27-30, 2019, Berlin Germany.* 2019.
458. Krieger S, Sorrells SF, Nickerson M, Pace TW. Mechanistic insights into corticosteroids in multiple sclerosis: War horse or chameleon? *Clin Neurol Neurosurg.* 2014;119:6-16. [Link](#)
459. Lafayette RA, Kelepouris E. Immunoglobulin A nephropathy: advances in understanding of pathogenesis and treatment. *Am J Nephrol.* 2018;47(suppl 1):43-52. [Link](#)
460. Lal R, Bell S, Challenger R, et al. Pharmacodynamics and tolerability of repository corticotropin injection in healthy human subjects: A comparison with intravenous methylprednisolone. *J Clin Pharmacol.* 2016;56(2):195-202. [Link](#)
461. Landon J, Friedman M, Greenwood FC. Antibodies to corticotrophin and their relation to adrenal function in children receiving corticotrophin therapy. *Lancet.* 1967;1(7491):652-655. [Link](#)
462. Le JT, Frost JDJ, Swann JW. Acthar® Gel (repository corticotropin injection) dose-response relationships in an animal model of epileptic spasms. *Epilepsy Behav.* 2021;116:107786. [Link](#)
463. Levell MJ, Stitch SR, Noronha M, Vas C. The assessment of adrenal-cortical function in patients receiving corticotrophin therapy. *Acta Endocrinol.* 1970;64(2):287-294. [Link](#)
464. Lieberman K, Ettinger L, Picarelli C. ACTH gel for treating steroid resistance (SR) and oral steroid intolerance (OSI) in pediatric minimal change nephrotic syndrome (MCNS) [IPNA abstract P-SUN194]. *Pediatr Nephrol.* 2013;28(8):1598
465. Lieberman KV, Pavlova-Wolf A. Adrenocorticotrophic hormone therapy for the treatment of idiopathic nephrotic syndrome in children and young adults: A systematic review of early clinical studies with contemporary relevance. *J Nephrol.* 2017;30(1):35-44. [Link](#)
466. Linden JR, Flores C, Shetty SV, Zhao B, Rumah KR, Ma Y, Vartanian T. In vivo modeling of the nascent multiple sclerosis lesion: epsilon toxin treated mice develop focal demyelinating lesions [ECTRIMS abstract P357]. *Mult Scler.* 2015; 23(sup 11):142-143
467. Lisak R, Nedelkoska L, Benjamins J. The melanocortin ACTH 1-39 promotes protection of oligodendrocytes by astroglia. *J Neurol Sci.* 2016;362:21-26. [Link](#)

468. Lisak R, Nedelkoska L, Benjamins J. The melanocortin receptor ACTH1-39 may protect oligodendroglia by inhibiting protein kinase C [AAN abstract P5.287]. *Neurology*. 2016;86(16 suppl 1):[published online: April 5, 2016].
469. Lisak RP, Nedelkoska L, Benjamins JA. Melanocortin 4 receptors on oligodendrocytes and oligodendrocyte precursors signal ACTH protection from in vitro death induced by mechanisms involved in cell damage in multiple sclerosis.[ECTRIMS abstract P579]. *Mult Scler*. 2015;23(11 suppl 1):273,
470. Lisak R, Nedelkoska L, Benjamins J. ACTH1-39 protection of oligodendrocytes from damage relevant to multiple sclerosis involves both direct and indirect mechanisms. [AAN abstract P2.189]. *Neurology*. 2015;84(suppl 14):P2.189
471. Lisak RP, Nedelkoska L, Bealmear B, Benjamins JA. Melanocortin receptor agonist ACTH 1-39 protects rat forebrain neurons from apoptotic, excitotoxic and inflammation-related damage. *Exp Neurol*. 2015;273:161-167. [Link](#)
472. Lisak R, Bealmear B, Nedelkoska L, Benjamins J. Schwann cells express melanocortin receptor subtypes: activation by ACTH 1-39 and alpha-MSH enhances proliferation [AAN abstract P1_430]. *Neurology*. 2018;90(15 suppl 1):P1_430.
473. Lisak R, Nedelkoska L, Touil H, Bar-Or A, Benjamins J. Sigma 1 receptor and melanocortin receptor agonists protect oligodendroglia from death induced by products of B cells from multiple sclerosis patients. [ECTRIMS abstract P582]. *Mult Scler*. 2018;24(S2):280
474. Lisak R, Bealmear B, Nedelkoska L, Esen N, Dore-Duffy P, Benjamins J. Schwann cells express melanocortin receptor subtypes: Activation enhances proliferation and differentiation [PNS abstract 49]. *J Peripher Nerv Syst*. 2020;25(4):454-455.
475. Loram LC, Culp ME, Connolly-Strong EC, Sturgill-Koszycki S. Melanocortin peptides: Potential targets in systemic lupus erythematosus. *Inflammation*. 2015;38(1):260-271. [Link](#)
476. Mackay JS, Sheridan B, Weaver JA. Intermittent corticotrophin therapy. Integrity of pituitary-adrenal function. *Practitioner*. 1970;205(229):646-651. [Link](#)
477. Mackay MT, Weiss SK, Adams-Webber T, et al. Practice parameter: Medical treatment of infantile spasms: Report of the American Academy of Neurology and the Child Neurology Society. *Neurology*. 2004;62(10):1668-1681. [Link](#)
478. Mallipattu SK, He JC. The podocyte as a direct target for treatment of glomerular disease? *Am J Physiol Renal Physiol*. 2016;311(1):F46-F51. [Link](#)
479. Mahmoud TG, Frits M, Iannaccone C, Bykerk VP, Bingham C, Weinblatt M, Shadick NA. Correlates of successful flare management: The role of clinician-driven treatment, home-based strategies, and medication change [ACR/ARHP abstract 2485]. *Arthritis Rheumatol*. 2016;68(suppl 10):3300-3303.
480. Marques N, Sanchez de la Pena S, Ungar F, Halberg F. Circadian stage-dependent effect of ACTH and melatonin on protein synthesis by rat adrenal cells. *Braz J Med Biol Res*. 1988;21(4):759-762. [Link](#)
481. McElhaney JL. Repository corticotropin injection as an adjunct to smoking cessation during the initial nicotine withdrawal period: Results from a family practice clinic. *Clin Ther*. 1989;11(6):854-861. [Link](#)
482. Mechtler L., Rothrock J., Cady R., McAllister P. A randomized, open-label, parallel two-arm study evaluating the efficacy of H.P. acthar injection gel in the treatment of adults with intractable chronic migraine [AAN abstract P7.182]. *Neurology*. 2014;82(suppl 10):P7.182
483. Millar JH, Rahman R, Vas CJ, Noronha MJ, Liversedge LA, Swinburn WR. Effect of withdrawal of corticotrophin in patients on long-term treatment for multiple sclerosis. *Lancet*. 1970;1(7649):700-701. [Link](#)
484. Millar JH, Vas CJ, Noronha MJ, Liversedge LA, Rawson MD. Long-term treatment of multiple sclerosis with corticotrophin. *Lancet*. 1967;2(7513):429-431. [Link](#)
485. Montroy T, Fiechtner JJ. A single-site, investigator initiated, open-label trial of the adrenocorticotrophic hormone (ACTH) analogue HP Acthar Gel (repository corticotropin injection) among subjects with moderately to severely active systemic lupus erythematosus (SLE) [EULAR abstract AB0382]. *Ann Rheum Dis*. 2013;72(suppl 3):904
486. Nelson SD, Mackay JS, Sheridan B, Weaver JA. Intermittent corticotrophin therapy study of lymphocyte transformation in vitro in rheumatoid arthritis. *Ann Rheum Dis*. 1969;28(5):524-528. [Link](#)

487. Nguyen QD, Anesi SD, Chexal S, Chu DS, Dayani PN, Leng T, Meleth D, Sallam A, Sheppard JD, Silverstein SM, Tauber J, Toyos R, Wang RC, Foster CS. Navigating the use of RCI in the management of NIU: a delphi study [SE abstract]. *Abstract presented at Sonoma Eye 2019, March 21-24, 2019, Sonoma, CA.* 2019.
488. Obi O, Judson M, Maier L, Wells A, Baughman R. Role of baseline dyspnea index (BDI) and transition dyspnea index (TDI) as a measure of self-reported health related quality of life in sarcoidosis patients [ATS abstract A5609]. *Am J Respir Crit Care Med.* 2019;199:A5609.
489. Olsen NJ, Decker DA, Higgins P, et al. Direct effects of H.P. Acthar® Gel on human B lymphocyte activation in vitro. *Arthritis Res Ther.* 2015;17:300. [Link](#)
490. Olsen N, McAloose C, Benko A, Kovacs W, Decker D, Becker P. Repository corticotropin injection (H.P. Acthar® Gel) exerts direct effects on human B cells to suppress IL4/CD40L-stimulated proliferation and immunoglobulin G production in vitro [AAI abstract IRC11P.437]. *J Immunol.* 2015;194(suppl 1):197.19-197.19
491. Olsen N, Benko A, McAloose C, Sunyer T, Becker P. Repository corticotropin injection exerts direct acute effects on human b cell gene expression distinct from the actions of glucocorticoids [IC SLE ACE abstract 53]. *Lupus.* 2017;4(suppl 1):A23.
492. Olsen N, Benko A, McAloose C, Becker P, Wright D, Sunyer T, Imamura-Kawasawa Y, Kovacs W. Repository corticotropin injection (H.P. Acthar Gel®) reverses critical elements of the TLR9/anti-IGM response in human B cells in vitro [Lupus 21st century abstract AI-14]. *Lupus Sci Med.* 2018;5(suppl 2):A7.
493. Olsen N, Benko A, Becker P, Wright D, Sunyer T, Kawasawa Y, Kovacs W. Repository corticotropin injection (HP Acthar Gel) reverses critical elements of the TLR9/anti-IgM response in human B cells in vitro [LUPUS abstract 1]. *Lupus Sci Med.* 2019;6(suppl 1):A 1
494. Olsen NJ, Benko AL, McAloose CA, Becker PM, Wright D, Sunyer T, Kawasawa YI, Kovacs WJ. Repository corticotropin injection reverses critical elements of the TLR9/B cell receptor activation response in human B cells in vitro. *Clin Immunol.* 2019;201:70-78. [Link](#)
495. Parr EJ. Hay fever treated with ACTH gel. *Clin Allergy.* 1976;6(5):479-486. [Link](#)
496. Poola N, Due B, Wright D, Chin T, Zaman F. Characterization of the immunopharmacology of repository corticotropin injection (Acthar® Gel) compared with synthetic ACTH1-24 depot and methylprednisolone in healthy human subjects [AAPS abstract 290222]. *Abstract presented at AAPS PharmSci360, October 26-November 5, 2020, Virtual Meeting* <https://www.eventscribe.com/2020/PharmSci360/fsPopup.asp?Mode=posterinfo&PosterID=290222>. 2020.
497. Poola N, Due B, Wright D, Brooks LR, Zaman F. Pharmacokinetics and pharmacodynamics of repository corticotropin injection compared with synthetic ACTH1-24 depot and methylprednisolone in healthy subjects. *Clin Pharmacol Drug Dev.* 2021:[published online: September 15, 2021]. [Link](#).
498. Poyan-Mehr A, Sadeghi-Najafabadi M, Stillman I, Friedman D, Steinman T. Creation of a glomerular disease study and trial consortium in Boston [NKF abstract 269]. *Am J Kidney Dis.* 2016;67(5):A86
499. Philbin M, Niewoehner J, Wan GJ. Clinical and economic evaluation of repository corticotropin injection: a narrative literature review of treatment efficacy and healthcare resource utilization for seven key indications. *Adv Ther.* 2017;34(8):1775-1790. [Link](#)
500. Quyyum I, Lyman NW, Acthar induced hypokalemic metabolic alkalosis. [ASN abstract FR-PO010] *J Am Soc Nephrol.* 2015; 26 (suppl): 359A.
501. Rahaghi FF, Sweiss N, Saketkoo LA, Scholand MB, Barney J, Gerke A, Lower EE, Mirsaeidi M, O'Hare L, Rumbak MJ, Samavati L, Baughman RP. Repository corticotrophin injection (RCI) for sarcoidosis: results of a Delphi study. [ATS abstract P1336] *Am J Respir Crit Care Med.* 2018;197:A1517.
502. Rahaghi FF, Baughman RP, Saketkoo LA, Sweiss NJ, Barney JB, Birring SS, Costabel U, Crouser ED, Drent M, Gerke AK, Grutters JC, Hamzeh NY, Huizar I, Ennis James W 4th, Kalra S, Kullberg S, Li H, Lower EE, Maier LA, Mirsaeidi M, Muller-Quernheim J, Carmona Porquera EM, Samavati L, Valeyre D, Scholand MB. Delphi consensus recommendations for a treatment algorithm in pulmonary sarcoidosis. *Eur Respir Rev.* 2020;29(155):190146. [Link](#).
503. Rahaghi FF, Sweiss NJ, Saketkoo LA, Scholand MB, Barney JB, Gerke AK, Lower EE, Mirsaeidi M, O'Hare L, Rumbak MJ, Samavati L, Baughman RP. Management of repository

- corticotrophin injection therapy for pulmonary sarcoidosis: a Delphi study. *Eur Respir Rev.* 2020;29(155):190147. [Link](#)
504. Rajguru P, Ryan S, McLaurin E, Wirta D, Grieco J. A novel method for collecting patient reported outcomes (PROs): developing and validating electronic PROs on a mobile smartphone platform. [ARVO abstract 110]. *Invest Ophthalmol Vis Sci.* 2020;61(7):110.
505. Rosenblum AH, Rosenblum P. Anaphylactic reactions to adrenocorticotrophic hormone in children. *J Pediatr.* 1964;64:387-395. [Link](#)
506. Rice JB, White AG, Scarpati LM, Wan G, Nelson WW. Long-term systemic corticosteroid exposure: a systematic literature review. *Clin Ther.* 2017;39(11):2216-2229. [Link](#)
507. Rice JB, White A, Lopez A, Wagh A, Qin Y, Mitri G, Bartels-Peculis L, Ciepiewska G, Nelson W. Quantifying clinical and economic outcomes associated with chronic corticosteroid exposure in a US population [ACR abstract 1801] *Arthritis Rheumatol.* 2017; 69(suppl 10):1801.
508. Rice JB, White AG, Scarpati LM, Wan GJ, Nelson WW. The burden of non-infectious intraocular inflammatory eye diseases: a systematic literature review. *Curr Med Res Opin.* 2018;34(12):2095-2103. [Link](#).
509. Ross AP, Ben-Zacharia A, Harris C, Smrtka J. Multiple sclerosis, relapses, and the mechanism of action of adrenocorticotrophic hormone. *Front Neurol.* 2013;4:21. [Link](#)
510. Rovinski R, Tian R, Mirsaeidi M. Repository corticotropin injection has demonstrated anti-inflammatory effect in in vitro model of sarcoidosis granuloma [ATS abstract A4264]. 2021;203(suppl):A4264.
511. Scantlebury MH, Chun KC, Ma SC, Rho JM, Kim DY. Adrenocorticotrophic hormone protects learning and memory function in epileptic Kcna1-null mice. *Neurosci Lett.* 2017;645(0304-3940):14-18. [Link](#)
512. Si J, Ge Y, Zhuang S, Wang LJ, Chen S, Gong R. Adrenocorticotrophic hormone ameliorates acute kidney injury by steroidogenic-dependent and -independent mechanisms. *Kidney Int.* 2013;83(4):635-646. [Link](#)
513. Sim J, Batech M, Hever A, Harrison TN, Vora S, Vollenweider L, Pavlova-Wolf A, Kalantar-Zadeh K. Distribution of glomerulonephritis among an ethnically diverse United States population. [ASN abstract SA-PO890]. *J Am Soc Nephrol.* 2014;25(suppl):845A
514. Sim JJ, Batech M, Harrison TN, Shaw SF, Vora S, Hever A. Incident ESRD and eGFR decline among the most common glomerulopathies (GN): The Kaiser Permanente outhern California (KPSC) cohort [ASN abstract TH-PO844]. *J Am Soc Nephrol.* 2016;27(suppl):288A-289A.
515. Sotiropoulos M, Lokhande H, Rosso M, Healy B, Yano H, Gaitan-Walsh P, Kimbrough D, Glanz B, Weiner H, Chitnis T. The contribution of relapse recovery to long-term outcomes in MS [ACTRIMS abstract LB317]. *Abstract presented at ACTRIMS Forum 2020 February 27-29, 2020, West Palm Beach, FL.* 2020.
516. Sotiropoulos MG, Lokhande H, Healy BC, Polgar-Turcsanyi M, Glanz BI, Bakshi R, Weiner HL, Chitnis T. Relapse recovery in multiple sclerosis: Effect of treatment and contribution to long-term disability. *Mult Scler J Exp Transl Clin.* 2021;7(2):1-11. [Link](#).
517. Stafstrom CE, Arnason BG, Baram TZ, et al. Treatment of infantile spasms: Emerging insights from clinical and basic science perspectives. *J Child Neurol.* 2011;26:1411-1421. [Link](#)
518. Tanritanir A, Vieluf S, Jafarpour S, Wang X, Loddenkemper T. EEG Biomarkers of Repository Corticotropin Injection Treatment. *J Clin Neurophysiol.* 2021;1:[published online: August 6, 2021]. [Link](#).
519. Tait JF, Tait SA, Bell JB, Hyatt PJ, Williams BC. Further studies on the stimulation of rat adrenal capsular cells: Four types of response. *J Endocrinol.* 1980;87(1):11-27. [Link](#)
520. Teske S, Shepard L, Tayi R. Melanocortin Peptides – endogenous mediators of inflammation [FOCIS] abstract F.34.]. Abstract presented at FOCIS; June 22 - 25, 2016; Boston, MA: 78-79
521. Tian R, Zhang C, Holt G, Schesser K, Altman N, Jackson R, Mirsaeidi M. Development of a sarcoidosis-like granuloma in vitro model using peripheral blood mononuclear cells of patients with sarcoidosis [ATS abstract A2428]. *Am J Respir Crit Care Med.* 2019;199:A100.

522. Tumlin JA, Galphin CM, Rovin BH. Advanced diabetic nephropathy with nephrotic range proteinuria: A pilot study of the long-term efficacy of subcutaneous ACTH gel on proteinuria, progression of CKD, and urinary levels of VEGF and MCP-1. *J Diabetes Res.* 2013;489869. [Link](#)
523. Tumlin JA, Campbell KN. Proteinuria in nephrotic syndrome: mechanistic and clinical considerations in optimizing management. *Am J Nephrol.* 2018;47(suppl 1):1-2. [Link](#)
524. Van de Logt A-E, Hofstra JM, Wetzels JF. Pharmacological treatment of primary membranous nephropathy in 2016. *Expert Rev Clin Pharmacol* 2016;9(11):1463-1478. [Link](#)
525. VanMeter S, Becker P, Zhao E, Levine T. Rationale and design for a multicenter, double-blind, placebo-controlled study to assess the efficacy and safety of H.P. Acthar® Gel in the treatment of subjects with Amyotrophic Lateral Sclerosis [AAN abstract P5.331]. *Neurology.* 2018;(15 suppl):P5.331.
526. Uehara M, Al DB, Azzi J, Abdi R. Implication of melanocortin receptors in alloimmunity [ATC abstract 377]. *Am J Transplant.* 2019;19(suppl 3): 377.
527. Waltrip RW, Mahler N, Ahsan A, Herbers LB. Focused HCP discussion and proactive education on relapse identification and management improves patient reporting and timely treatment of MS relapse [CMSC abstract RTH01]. *Int J MS Care.* 2019;21:97.
528. Wang H, Jia Z, Liu G, Yang T. Adrenocorticotrophic hormone attenuates diabetic nephropathy in Zucker diabetic fatty rats via inhibition of oxidative and inflammatory responses. [ASN PUB068]. *J Am Soc Nephrol.* 2010;21(suppl):825A.
529. Wang X, Pham L, Poola N, Brooks LR, Due B. Comparison of steroidogenic exposure following the administration of repository corticotropin injection with a synthetic ACTH1-24 depot and methylprednisolone in healthy subjects. *Clin Pharmacol Drug Dev.* 2021;10(7):777-788. [Link](#)
530. Weaver JA. The therapeutic uses of long acting ACTH. *Scott Med J.* 1978;23(2):153-160. [Link](#)
531. Wright D, Zweifel B, Fitch R. Treatment with repository corticotropin injection reduces the progression of experimental autoimmune uveitis in rats [ARVO abstract 531- B0086]. *Invest Ophthalmol Vis Sci.* 2017;58(8):531.
532. Wright AD, Sharma P, Zweifel B, Oh L. Suppression of acute uveitis following treatment with repository corticotropin injection. [Immunology abstract 127.9]. *J Immunol.* 2017;198(suppl 1):127.9.
533. Wright D, Zweifel B, Settle S, Fitch R. Repository corticotropin injection (H.P. Acthar® Gel) inhibits bone degradation in rat adjuvant-induced arthritis model [ACR abstract 57] . *Arthritis Rheumatol.* 2018;70(S9):55-56.
534. Wright D, Fitch R. Repository corticotropin injection (RCI: H.P. Acthar® gel) enhances remyelination after cuprizone-induced demyelination [CMSC abstract NDM04]. *Int J MS Care.* 2019;21(suppl 1):61-62.
535. Wright D, Zweifel B, Sharma P, Galen K, Fitch R. Reduced steroidogenic activity of repository corticotropin injection (RCI) induces a distinct cytokine response following t cell activation [EULAR abstract AB0082]. *Ann Rheum Dis.* 2019;78:1504.
536. Zhang C, Holt G, Schesser K, Altman N, Jackson R, Schally A, Mirsaeidi M. a-Melanocyte stimulating hormone has anti-inflammatory properties in granuloma via marco and and p-CREB [ATS abstract A4506]. *Am J Respir Crit Care Med.* 2019;199:A4506.
537. Zhao J, Jiang L, Uehara M, Banouni N, Al Dulaijan BS, Azzi J, Ichimura T, Li X, Jarolim P, Fiorina P, Tullius SG, Madsen JC, Kasinath V, Abdi R. ACTH treatment promotes murine cardiac allograft acceptance. *JCI Insight.* 2021;6(13):43385. [Link](#)
538. Zhou Y, Lower EE, Li H-P, Costea A, Attari M, Baughman RP. Cardiac sarcoidosis: the impact of age and implanted devices on survival. *Chest.* 2017 Jan;151(1):139-148. [Link](#)

There is a vast body of clinical data in the peer-reviewed literature regarding the therapeutic use of Acthar® Gel (repository corticotropin injection). For more information, please contact our Medical Information Group by phone at 800.844.2830, by fax at 913.451.6409, or by email at medinfo@mnk.com