

## UTILIZATION MANAGEMENT MEDICAL POLICY

- POLICY:** Repository Corticotropin – Cortrophin Gel Utilization Management Medical Policy
- Purified Cortrophin™ Gel (repository corticotropin subcutaneous and intramuscular injection – ANI)

**REVIEW DATE:** 04/19/2023

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### OVERVIEW

Cortrophin Gel, a porcine derived purified corticotropin (adrenocorticotrophic hormone [ACTH] {1-39}) product, is indicated in the following disorders:<sup>1</sup>

- **Allergic states**, such as atopic dermatitis and serum sickness.
- **Collagen diseases**, during an exacerbation or as a maintenance therapy in selected cases of systemic lupus erythematosus and systemic dermatomyositis (polymyositis).
- **Dermatologic diseases**, such as severe erythema multiforme (Stevens-Johnson syndrome) and severe psoriasis.
- **Edematous state** including to induce a diuresis or a remission of proteinuria in the nephrotic syndrome without uremia of the idiopathic type or that due to lupus erythematosus.
- **Nervous system**, acute exacerbations of multiple sclerosis.
- **Respiratory diseases** such as symptomatic sarcoidosis.
- **Rheumatoid disorders**, as an adjunctive therapy for short-term administration (to tide the patient over an acute episode or exacerbation) in psoriatic arthritis, rheumatoid arthritis (including juvenile rheumatoid arthritis) [selected cases may require low-dose maintenance therapy], ankylosing spondylitis, and acute gouty arthritis.
- **Ophthalmic diseases** including severe acute and chronic allergic and inflammatory processes involving the eye and its adnexa such as allergic conjunctivitis, keratitis, iritis and iridocyclitis, diffuse posterior uveitis and choroiditis, optic neuritis, chorioretinitis, and anterior segment inflammation.

### Clinical Efficacy

A recent review regarding repository corticotropin found few randomized controlled trials supporting the clinical benefit of repository corticotropin or ACTH for various conditions (e.g., use in rheumatoid arthritis, ankylosing spondylitis, optic neuritis, systemic lupus erythematosus, and nephrotic syndrome).<sup>2</sup> Most data suggest that repository corticotropin or ACTH was not superior to corticosteroids for treating relapses in patients with multiple sclerosis.

### Guidelines

Several guidelines discuss repository corticotropin or ACTH.

- **Kidney Disease Improving Global Outcomes (KDIGO) published clinical practice guidelines for the management of glomerular disease (2021).**<sup>3</sup> This includes diagnoses such as nephrotic syndrome, membranous nephropathy, immunoglobulin A nephropathy, minimal change disease, infection-related glomerulonephritis, focal segmental glomerulosclerosis, membranoproliferative glomerulonephritis, and lupus nephritis. ACTH is not prominent in the guidelines and there is a lack of quality evidence regarding ACTH.
- **National Multiple Sclerosis Society** has recommendations regarding corticosteroids in the management of multiple sclerosis relapses or exacerbations.<sup>4</sup> High-dose corticosteroids are the accepted standard of care short-term. The most common regimen is 500 to 1,000 mg of intravenous methylprednisolone given daily for 3 to 5 days, with or without an oral steroid tapering regimen

(most often prednisone) for 1 to 3 weeks. ACTH and high-dose intravenous methylprednisolone have been shown to possess similar efficacy in the management of multiple sclerosis relapses.<sup>5</sup>

- The **American College of Rheumatology** has many guidelines regarding use in rheumatoid-type conditions.<sup>6</sup> ACTH does not have a prominent role and is generally not recommended for use in any of the related American College of Rheumatology guidelines.
- The **American College of Rheumatology has guidelines for the management of gout (2020).**<sup>7</sup> For gout flare management, using colchicine, non-steroidal anti-inflammatory drugs, or glucocorticoids (oral, intraarticular, or intramuscular) are appropriate first-line therapy for gout flare over interleukin-1 inhibitors or ACTH.
- **The European Respiratory Society published guidelines on the treatment of sarcoidosis (2021).**<sup>8</sup> Repository corticotropin use should be reserved for patients who have failed prior treatments (e.g., steroids, antimetabolites). Only limited data are available. Repository corticotropin should be considered in a case by case basis only when other therapies are not effective or tolerated.

### **POLICY STATEMENT**

Due to the lack of updated clinical efficacy data and potential safety concerns with long-term use, **approval is not recommended** for Cortrophin Gel. The current Cortrophin Gel efficacy information is insufficient to determine if the medication demonstrates any clinically meaningful benefits beyond those provided by other available therapies.

**Automation:** None.

### **RECOMMENDED AUTHORIZATION CRITERIA**

None.

### **CONDITIONS NOT RECOMMENDED FOR APPROVAL**

Coverage of Cortrophin Gel is not recommended in the following situations:

1. **Ankylosing Spondylitis.** The American College of Rheumatology guidelines for the treatment of ankylosing spondylitis do not convey a role for ACTH in this condition.<sup>9,10</sup>
2. **Dermatomyositis or Polymyositis.** British Society for Rheumatology guidelines on the management of pediatric, adolescent, and adult patients with idiopathic inflammatory myopathy (2022) do not cite ACTH as an agent to utilize in patients with such conditions.<sup>11</sup>
3. **Diabetic Nephropathy.** ACTH is not a cited therapy or the standard of care for the management of chronic kidney disease in patients with diabetes.<sup>3,12</sup>
4. **Glomerular Kidney Diseases.**  
Note: Diagnoses can include nephrotic syndrome, membranous nephropathy, immunoglobulin A nephropathy, minimal change disease, infection-related glomerulonephritis, focal segmental glomerulosclerosis, and membranoproliferative glomerulonephritis. ACTH is not prominent in related guidelines from KDIGO (2021) and there is a lack of quality evidence regarding ACTH to support its use.<sup>3</sup>

5. **Gout.** American College of Rheumatology guidelines for gout (2020) recommend other therapies beside ACTH for gout flare management (e.g., colchicine, non-steroidal anti-inflammatory drugs, or glucocorticoids).<sup>7</sup>
6. **Infantile Spasms, Treatment.** Purified Cortrophin Gel is not FDA-approved for this use.<sup>1</sup>
7. **Juvenile Idiopathic Arthritis.** Related guidelines from the American College of Rheumatology regarding the treatment of juvenile idiopathic arthritis (2021) do not mention ACTH as having a role for this disease.<sup>13</sup>
8. **Lupus Nephritis.** The KDIGO guidelines for the management of glomerular disease (2021) cite many other agents besides ACTH for the management of this condition.<sup>3</sup> The European League Against Rheumatism-European Renal Association-European Dialysis and Transplantation Association joint recommendations on the management of lupus nephritis do not cite ACTH as a therapy to use in this condition.<sup>14</sup>
9. **Multiple Sclerosis, Acute Exacerbations.** High-dose corticosteroids, usually intravenous methylprednisolone, are the accepted standard of care short-term for acute relapses or exacerbations.<sup>4</sup>
10. **Ophthalmic Conditions.** Only limited data describes the use of ACTH in ophthalmic-related conditions (e.g., acute optic neuritis, keratitis, retinal vasculitis).<sup>2,15-17</sup> Prospective data are needed to more rigorously define the efficacy and safety of ACTH in ocular disease.
11. **Psoriatic Arthritis.** The American College of Rheumatology/National Psoriasis Foundation guidelines for the treatment of psoriatic arthritis (2018) do not mention a role for ACTH in this condition.<sup>18</sup>
12. **Rheumatoid Arthritis.** The American College of Rheumatology guidelines for the treatment of rheumatoid arthritis (2021) do not mention a role for ACTH in this disease state.<sup>19</sup>
13. **Sarcoidosis.** The European Respiratory Society published guidelines on the treatment of sarcoidosis (2021).<sup>8</sup> Repository corticotropin use should be reserved for patients who have failed prior treatments (e.g., steroids, antimetabolites). Only limited data are available. Repository corticotropin should be considered in a case by case basis only when other therapies are not effective or tolerated.
14. Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

## REFERENCES

1. Purified Cortrophin™ Gel subcutaneous and intramuscular injection [prescribing information]. Baudette, MN: ANI; November 2021.
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4. National Multiple Sclerosis Society. Expert Opinion Paper. National Clinical Advisory Board of the National Multiple Sclerosis Society. Treatment Recommendations for Physicians. Recommendations Regarding Corticosteroids in the Management of Multiple Sclerosis. Available at: [http://www.nationalmssociety.org/NationalMSSociety/media/MSNationalFiles/Brochures/ExpOp\\_Steroids.pdf](http://www.nationalmssociety.org/NationalMSSociety/media/MSNationalFiles/Brochures/ExpOp_Steroids.pdf). Accessed on April 17, 2023.
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12. American Diabetes Association Professional Practice Committee. Chronic Kidney Disease and Risk Management: Standards of Medical Care in Diabetes-2022. *Diabetes Care*. 2022;45(1):S175-S184.
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17. Anesi SD, Chang PY, Maleki A, et al. Treatment of noninfectious retinal vasculitis using subcutaneous repository corticotropin injection. *J Ophthalmic Vis Res*. 2021;16:219-233.
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## HISTORY

Type of Revision	Summary of Changes	Review Date
Early Annual Revision	<b>Conditions Not Recommended for Approval:</b> The following conditions were added: Ankylosing Spondylitis; Dermatomyositis or Polymyositis; Diabetic Nephropathy; Glomerular Kidney Diseases; Gout; Juvenile Idiopathic Arthritis; Lupus Nephritis; Multiple Sclerosis, Acute Exacerbations; Ophthalmic Conditions; Psoriatic Arthritis; Rheumatoid Arthritis; and Sarcoidosis. A Note was added to the condition of Glomerular Kidney Diseases that provides examples of various diagnoses that this involves.	04/13/2022
Annual Revision	No criteria changes.	04/19/2023