Repository Corticotropin Injection (ACTH Gel, H.P. Acthar® Gel)

Policy # 00230
Original Effective Date: 07/16/2008
Current Effective Date: 09/01/2018

Applies to all products administered or underwritten by Blue Cross and Blue Shield of Louisiana and its subsidiary, HMO Louisiana, Inc. (collectively referred to as the “Company”), unless otherwise provided in the applicable contract. Medical technology is constantly evolving, and we reserve the right to review and update Medical Policy periodically.

Note: Vigabatrin (Sabril®)‡ is addressed in medical policy 00244.

When Services May Be Eligible for Coverage
Coverage for eligible medical treatments or procedures, drugs, devices or biological products may be provided only if:

- Benefits are available in the member’s contract/certificate, and
- Medical necessity criteria and guidelines are met.

Based on review of available data, the Company may consider repository corticotropin injection for the treatment of infantile spasms (West’s syndrome) to be eligible for coverage.

Patient Selection Criteria
Coverage eligibility for the use of repository corticotropin injection will be considered when the following criteria are met:

- Patient has a diagnosis of infantile spasms AND is less than 2 years of age

When Services Are Considered Not Medically Necessary
The use of repository corticotropin injection as treatment of steroid-responsive conditions not mentioned in the above patient selection criteria is considered to be not medically necessary.**

The use of repository corticotropin injection in patients with acute exacerbations of multiple sclerosis (MS) is considered to be not medically necessary.**

The use of repository corticotropin injection in diagnostic testing of adrenocortical function is considered to be not medically necessary.**

When Services Are Considered Investigational
Coverage is not available for investigational medical treatments or procedures, drugs, devices or biological products.

Based on review of available data, the Company considers the use of repository corticotropin injection for conditions that are not responsive to corticosteroid therapy (including, but not limited to, use in tobacco cessation, acute gout and childhood epilepsy) OR for any non-FDA approved indication to be investigational.*
Repository Corticotropin Injection (ACTH Gel, H.P. Acthar® Gel)

Policy # 00230
Original Effective Date: 07/16/2008
Current Effective Date: 09/01/2018

Background/Overview
Repository corticotropin injection (H.P. Acthar® Gel) is a purified, sterile preparation of the natural form of adrenocorticotropic hormone (ACTH) in gelatin to provide a prolonged release after intramuscular or subcutaneous injection. Adrenocorticotropic hormone works by stimulating the adrenal cortex to produce cortisol, corticosterone, and a number of other hormones.

H.P. Acthar Gel is an ACTH analogue indicated as monotherapy for the treatment of infantile spasms in infants and children less than 2 years of age. According the package insert, H.P. Acthar gel may also be used for the following disorders and diseases: rheumatic, collagen, dermatologic, allergic states, ophthalmic, respiratory and edematous states. However, the drug was approved by the FDA in 1952 prior to the requirement that companies provide evidence of clinical efficacy.

Contraindications for use of this agent include scleroderma, osteoporosis, systemic fungal infections, ocular herpes simplex, recent surgery, history of or the presence of a peptic ulcer, congestive heart failure, uncontrolled hypertension, or sensitivity to proteins of porcine origin.

Unlike previous versions, the current product label does not mention the use of repository corticotropin injection for diagnostic testing of adrenocortical function.

Cosyntropin (Cortosyn®), a synthetic form of ACTH, is created by isolating the first 24 amino acids from ACTH peptide. Unlike the natural form of ACTH, which is given intramuscularly or subcutaneously, Cosyntropin should only be given intravenously. A depot formulation of cosyntropin (Synacthen Depot) is not approved by the U.S. Food and Drug Administration (FDA) for treating infantile spasms. However, it is available through a compassionate-use program through the specialty pharmacy Caligor Rx in New York.

West Syndrome/Infantile Spasms
West syndrome is a rare epileptic disorder of early infancy (90% of cases are diagnosed the first year of life) consisting of three main characteristics; infantile spasm, mental retardation, and hypsarrhythmia, a specific abnormal pattern on EEG. Often the term infantile spasms is used synonymously with West syndrome. Infantile spasms are characterized by an initial contraction phase followed by a more sustained tonic phase.

Another treatment option for infantile spasms is Vigabatrin (Sabril, Lundbeck, Inc.), which is an oral solution. Sabril is indicated as monotherapy for pediatric patients with infantile spasms for whom the potential benefits outweigh the potential risk of vision loss.

FDA or Other Governmental Regulatory Approval
U.S. Food and Drug Administration (FDA)
Acthar is currently approved in the U.S. for the treatment of infantile spasms, multiple sclerosis exacerbations, rheumatic disorders, collagen diseases, dermatologic diseases, allergic states, ophthalmic diseases, symptomatic sarcoidosis, and edematous states.
Rationale/Source

Infantile spasms

The effectiveness of H.P. Acthar Gel as a treatment for infantile spasms was demonstrated in a single blinded (video EEG Interpreter blinded) clinical trial in which patients were randomized to receive either a 2 week course of treatment with H.P. Acthar Gel (75 U/m²) intramuscular twice daily or prednisone 1 mg/kg by mouth twice daily. The primary outcome was a comparison of the number of patients in each group who were treatment responders, defined as a patient having complete suppression of both clinical spasms and hypsarrhythmia on a full sleep cycle video EEG performed 2 weeks following treatment initiation, rated by an investigator blinded to treatment. Thirteen of 15 patients (86.7%) responded to H.P. Acthar Gel as compared to 4 of 14 patients (28.6%) given prednisone (p < 0.002). The 2-week treatment was followed by a 2-week period of taper. Nonresponders to the prednisone treatment were eligible to receive H.P. Acthar Gel treatment. Seven of 8 patients (87.5%) responded to H.P. Acthar Gel after not responding to prednisone. Similarly, the 2 nonresponder patients from the H.P. Acthar Gel treatment were eligible to receive treatment with prednisone. One of the 2 patients (50%) responded to the prednisone treatment after not responding to H.P. Acthar Gel.

A supportive single-blind, randomized clinical trial comparing high-dose, long-duration treatment (150U/m² once daily for 3 weeks, n = 30) of H.P. Acthar Gel with low-dose, short-duration treatment (20U once daily for 2 weeks, n = 29) for the treatment of infantile spasms was also evaluated in infants and children less than 2 years of age. Nonresponders (defined as in the previously described study) in the low-dose group received a dose escalation at 2 weeks to 30U once daily. Nominal statistical superiority of the high dose treatment, as compared to the low dose treatment, was observed for cessation of spasms but not for the resolution of hypsarrhythmia.

In 2012 the American Academy of Neurology (AAN) and the Child Neurology Society updated the evidence-based guideline for the medical treatment of infantile spasms. The guidelines note that ACTH is a first-line agent for the short-term treatment of infantile spasms. The Infantile Spasms Working Group (ISWG) published a US consensus report on infantile spasms in 2010. Data regarding ACTH use in infantile spasms were detailed and it was determined that ACTH is an effective first-line therapy for infantile spasms.

Acute Exacerbations of Multiple Sclerosis

Although H.P. Acthar is indicated for the treatment of exacerbations of MS in adults, more recent studies evaluating multiple sclerosis have demonstrated that intravenous corticosteroids are at least as effective, or more effective than repository corticotropin. Acthar has been studied in patients with acute exacerbations of MS and short-term use, usually given IM or SC for 14 or fewer days, led to benefits in signs and symptoms of MS. A double-blind, randomized controlled trial found that ACTH given IM over 14 days had similar efficacy in acute exacerbations of MS as methylprednisolone given as 1 gram IV daily for 3 days.

Other potential uses of repository corticotrophin injection

There are a limited number of small case series reporting on the use of repository corticotropin injection for other corticosteroid-responsive conditions. For example, in 2011, Bomback et al published a retrospective case series in 21 patients with idiopathic, non-diabetic nephrotic syndrome who were treated with repository
corticotropin. Repository corticotropin was used as a primary therapy in 3 patients; the other 18 patients had failed a mean of 2.3 immunosuppressive regimens before using repository corticotropin. Four (19%) of the 21 patients were in complete remission, defined as stable or improved renal function with final proteinuria falling to less than 500 mg/d. An additional 7 (33%) of 21 patients had a partial remission (at least a 50% reduction in proteinuria and final proteinuria 500-3500 mg/d). Regarding these other uses of H.P. Acthar, data and guidelines do not suggest that Acthar has a substantial role in therapy. Further data are needed before use in other areas can be recommended.

References
Policy # 00230
Original Effective Date: 07/16/2008
Current Effective Date: 09/01/2018

Repository Corticotropin Injection (ACTH Gel, H.P. Acthar® Gel)

Policy # 00230
Original Effective Date: 07/16/2008
Current Effective Date: 09/01/2018

12/04/2009 Medical Policy Committee approval
12/16/2009 Medical Policy Implementation Committee approval. Title changed from “ACTH Gel (Adrenocorticotropic Hormone)” to “Repository Corticotropin Injection (ACTH Gel, H.P. Acthar Gel)”. No change to coverage eligibility.
07/01/2010 Medical Policy Committee approval
07/21/2010 Medical Policy Implementation Committee approval. Acute gout and childhood epilepsy added as investigational conditions.
12/01/2010 Medical Policy Committee review
12/15/2010 Medical Policy Implementation Committee approval. Added “in infants and children less than two years of age” to repository corticotropin injection for the treatment of infantile spasms (West’s syndrome) coverage eligibility statement.
12/08/2011 Medical Policy Committee review
12/21/2011 Medical Policy Implementation Committee approval. No change to coverage.
12/06/2012 Medical Policy Committee review
12/19/2012 Medical Policy Implementation Committee approval. No change to coverage.
09/05/2013 Medical Policy Committee review
09/18/2013 Medical Policy Implementation Committee approval. Policy now states that covered indications include infantile spasms and multiple sclerosis only. Updated background, source, rationale, investigational, and not medically necessary sections.
09/04/2014 Medical Policy Committee review
09/17/2014 Medical Policy Implementation Committee approval. No change to coverage.
09/03/2015 Medical Policy Committee review
09/23/2015 Medical Policy Implementation Committee approval. No change to coverage.
09/09/2016 Medical Policy Committee review
09/21/2016 Medical Policy Implementation Committee approval. No change to coverage.
01/01/2017 Coding update: Removing ICD-9 Diagnosis Codes
09/07/2017 Medical Policy Committee review
09/20/2017 Medical Policy Implementation Committee approval. No change to coverage.
06/07/2018 Medical Policy Committee review
06/20/2018 Medical Policy Implementation Committee approval. Policy now states that repository corticotropin is considered not medically necessary for exacerbations of multiple sclerosis. Updated background information, rationale, and references.

Next Scheduled Review Date: 06/2019

Coding
The five character codes included in the Blue Cross Blue Shield of Louisiana Medical Policy Coverage Guidelines are obtained from Current Procedural Terminology (CPT®)‡, copyright 2017 by the American Medical Association (AMA). CPT is developed by the AMA as a listing of descriptive terms and five character identifying codes and modifiers for reporting medical services and procedures performed by physician.

The responsibility for the content of Blue Cross Blue Shield of Louisiana Medical Policy Coverage Guidelines is with Blue Cross and Blue Shield of Louisiana and no endorsement by the AMA is intended or should be implied. The AMA disclaims responsibility for any consequences or liability attributable or related to any use, nonuse or interpretation of information contained in Blue Cross Blue Shield of Louisiana Medical Policy Coverage Guidelines. Fee schedules, relative value units, conversion factors and/or related components are not assigned by the AMA, are not part of CPT, and the AMA is not recommending their use. The AMA does not directly or indirectly practice medicine or dispense

©2018 Blue Cross and Blue Shield of Louisiana

Blue Cross and Blue Shield of Louisiana is an independent licensee of the Blue Cross and Blue Shield Association and incorporated as Louisiana Health Service & Indemnity Company.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without permission from Blue Cross and Blue Shield of Louisiana.
Repository Corticotropin Injection (ACTH Gel, H.P. Acthar<sup>®</sup> Gel)

Policy # 00230  
Original Effective Date: 07/16/2008  
Current Effective Date: 09/01/2018

medical services. The AMA assumes no liability for data contained or not contained herein. Any use of CPT outside of Blue Cross Blue Shield of Louisiana Medical Policy Coverage Guidelines should refer to the most current Current Procedural Terminology which contains the complete and most current listing of CPT codes and descriptive terms. Applicable FARS/DFARS apply.

CPT is a registered trademark of the American Medical Association.

Codes used to identify services associated with this policy may include (but may not be limited to) the following:

<table>
<thead>
<tr>
<th>Code Type</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPT</td>
<td>No codes</td>
</tr>
<tr>
<td>HCPCS</td>
<td>J0800</td>
</tr>
<tr>
<td>ICD-10 Diagnosis</td>
<td>E24.0-E24.9, G35, G40.821-G40.824</td>
</tr>
</tbody>
</table>

*Investigational – A medical treatment, procedure, drug, device, or biological product is Investigational if the effectiveness has not been clearly tested and it has not been incorporated into standard medical practice. Any determination we make that a medical treatment, procedure, drug, device, or biological product is Investigational will be based on a consideration of the following:

A. Whether the medical treatment, procedure, drug, device, or biological product can be lawfully marketed without approval of the U.S. Food and Drug Administration (FDA) and whether such approval has been granted at the time the medical treatment, procedure, drug, device, or biological product is sought to be furnished; or

B. Whether the medical treatment, procedure, drug, device, or biological product requires further studies or clinical trials to determine its maximum tolerated dose, toxicity, safety, effectiveness, or effectiveness as compared with the standard means of treatment or diagnosis, must improve health outcomes, according to the consensus of opinion among experts as shown by reliable evidence, including:

1. Consultation with the Blue Cross and Blue Shield Association technology assessment program (TEC) or other nonaffiliated technology evaluation center(s);
2. Credible scientific evidence published in peer-reviewed medical literature generally recognized by the relevant medical community; or
3. Reference to federal regulations.

**Medically Necessary (or “Medical Necessity”) - Health care services, treatment, procedures, equipment, drugs, devices, items or supplies that a Provider, exercising prudent clinical judgment, would provide to a patient for the purpose of preventing, evaluating, diagnosing or treating an illness, injury, disease or its symptoms, and that are:

A. In accordance with nationally accepted standards of medical practice;

B. Clinically appropriate, in terms of type, frequency, extent, level of care, site and duration, and considered effective for the patient's illness, injury or disease; and

C. Not primarily for the personal comfort or convenience of the patient, physician or other health care provider, and not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of that patient's illness, injury or disease.

For these purposes, "nationally accepted standards of medical practice" means standards that are based on credible scientific evidence published in peer-reviewed medical literature generally recognized by the relevant medical community, Physician Specialty Society recommendations and the views of Physicians practicing in relevant clinical areas and any other relevant factors.

†† Indicated trademarks are the registered trademarks of their respective owners.

NOTICE: Medical Policies are scientific based opinions, provided solely for coverage and informational purposes. Medical Policies should not be construed to suggest that the Company recommends, advocates, requires, encourages, or discourages any particular treatment, procedure, or service, or any particular course of treatment, procedure, or service.