Saudi Public Assessment Report

(Quality Summary Report)

Adrixa®

Type of Application: New Drug Application

Type of Product: Human Generic Drug

Active Pharmaceutical Ingredient(s): Dexamethasone

ATC code: H02AB02

Dosage Form: Solution for Injection

Dosage Strength: 4 mg/ml

Pack Size: 5 Ampoules

Shelf life: 24 Months

Storage Conditions: Store below 25°c

Reference Product in SA (if applicable): Dexamethasone Sodium Phosphate 4 mg/ml Solution for injection

Marketing Authorization Holder: Tabuk Pharmaceutical Manufacturing Co.

Manufacturer: Tabuk Pharmaceutical Manufacturing Co.

Registration No.: 0805222002

Date of Decision: Approved on 15/11/2021

Proposed Indications: Corticosteroid for use in certain endocrine and non-endocrine disorders responsive to corticosteroid therapy.

- **Intravenous or Intramuscular administration:** Adrixa is recommended for systemic administration by intravenous or intramuscular injection when oral therapy is not feasible or desirable in the following conditions:
  - Endocrine disorders

- Primary or secondary adrenocortical insufficiency: (Hydrocortisone or cortisone is the first choice, but synthetic analogues may be used with mineralocorticoids where applicable and, in infancy, mineralocorticoid supplementation is particularly important).

- Non-endocrine disorders: Adrixa may be used in the treatment of non-endocrine corticosteroid-responsive conditions, including:
  - Allergy and anaphylaxis: Angioneurotic oedema and anaphylaxis
  - Gastrointestinal: Crohn's disease and ulcerative colitis
  - Infection (with appropriate chemotherapy): Miliary tuberculosis and endotoxic shock
  - Neurological disorders: Raised intracranial pressure secondary to cerebral tumours and infantile spasms
  - Respiratory: Bronchial asthma and aspiration pneumonitis
  - Skin disorders: Toxic epidermal necrolysis
  - Shock: Adjunctive treatment where high pharmacological doses are needed. Treatment is an adjunct to and not a substitute for, specific and supportive measures the patient may require. Adrixa has been shown to be beneficial when used in the early treatment of shock, but it may not influence overall survival.

➢ **Subcutaneous administration:** In palliative care, patients receiving corticosteroids for symptoms such as fatigue, anorexia, refractory nausea and vomiting or adjuvant analgesia and symptomatic treatment of cord compression or raised Intracranial pressure, Adrixa may be administered subcutaneously as an alternative to the oral route when the latter is unacceptable or no longer feasible.

➢ **Local administration:** Adrixa is suitable for intraarticular or soft-tissue injection as adjunctive therapy for short-term administration in:

- Soft-tissue disorders: Such as carpal tunnel syndrome and tenosynovitis
- Intraarticular disorders: Such as rheumatoid arthritis and osteoarthritis with an inflammatory component Adrixa may be injected intralesionally in selected skin disorders such as cystic acne vulgaris, localized lichen simplex, and keloids.

Product Background

This product is considered as a human generic drug, for Saudi regulatory purposes. Furthermore, this product is qualified to follow the SFDA's normal submission regulatory pathway.

The SFDA approval for Adrixa® (Dexamethasone 4 mg/ml) is based on a review of the quality, safety and efficacy as summarized hereinafter:

Quality Aspects

Drug Substance

- Dexamethasone Sodium Phosphate is a white or almost white very hygroscopic powder. 1.0 gm sample of Dexamethasone Sodium Phosphate is soluble in 10 ml of water, 0.1 gm sample of Dexamethasone Sodium Phosphate is soluble in 100 ml of ethanol (96%), 10.0 mg sample of Dexamethasone Sodium Phosphate is insoluble in 100 ml methylene chloride. Dexamethasone Sodium Phosphate does have eight chiral centers. Polymorphism has been observed.
- The drug substance is manufactured by a multiple-step chemical synthesis.
- The structure of Dexamethasone Sodium Phosphate has been fully elucidated using several spectroscopic techniques.
- The drug substance specification includes relevant tests for proper quality control. The control methods are validated according to international guidelines.
- Appropriate stability data have been presented and justify the established re-test period.

Drug Product

- The finished product is available as a clear colorless solution. Each ampoule contains 4 mg/ml of dexamethasone sodium phosphate. The composition of the drug product is adequately described, qualitatively and quantitatively. Suitable pharmaceutical development data have been provided for the finished product composition and manufacturing process.
- The manufacturing process is described narratively and in sufficient detail, taking into account pharmaceutical development data. Batch manufacturing formulas and in-process controls are included. Satisfactory validation data pertaining to the commercial manufacturing process are provided.
- The drug product specification covers appropriate parameters for this dosage form which allow for proper control of the finished drug product. The control methods are validated according to international guidelines. Batch data show consistent quality of the drug product.
- The drug product is packaged in a type I clear glass ampoule.

- Appropriate stability data have been generated in the packaging material intended for commercial use and following relevant international guidelines. The data show good stability of the finished product and support the shelf life.

Clinical Aspects

Bioequivalence Study

A bioequivalence study is not required if the test product is an aqueous intravenous solution containing the same active substance as the reference product.

Product Information

The approved Summary of Product Characteristics (SPC) with the submission can be found in Saudi Drug Information System (SDI) at: https://sdi.sfda.gov.sa/

The date of revision of this text corresponds to that of the Saudi PAR. New information concerning the authorized medicinal product in question will not be incorporated into the Saudi PAR. New findings that could impair the medicinal product's quality, efficacy, or safety are recorded and published at (SDI or Summary Saudi-PAR report).

For inquiry and feedback regarding Saudi PAR, please contact us at Saudi.PAR@sdfa.gov.sa