COMPOSITION

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<table>
<thead>
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<tbody>
<tr>
<td>Clindamycin Phosphate</td>
<td>10 mg</td>
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<tr>
<td>Adapalene</td>
<td>1 mg</td>
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</tbody>
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CLINICAL PHARMACOLOGY

Clincent-A gel contains two active ingredients, Clindamycin and Adapalene, with different mechanisms of action which are thought to act complementary to each other in the treatment of mild to moderate inflammatory and non-inflammatory Acne.

Clindamycin phosphate is an inactive compound, is an antibiotic belonging to the lincomycin group of antibiotics that blocks protein synthesis in the bacteria responsible for causing infection of acne affected skin, and thus kills the bacteria, by rapidly converting in vivo into active form - Clindamycin. Propionibacterium acnes are bacteria that normally exist on the skin without causing any problems, living on fatty acids in the sebum (oil) secreted by the sebaceous glands. Over production of sebum causes the pores of the skin to become blocked and the pimples, whiteheads and blackheads (comedones) are formed. Clogged pores attract bacteria which then overgrow and cause infection. Clindamycin phosphate gets into the blackheads and blocks the growth of the bacteria, while at the same time free fatty acids on the skin surface are decreased from approximately 14% to 2% following application of clindamycin. These actions of Clindamycin phosphate reduces bacterial growth that contributes to formation acne skin lesions and prevents the spread of infection.

Adapalene is a retinoid-like compound has been demonstrated to possess anti-inflammatory properties. Adapalene is essentially stable to oxygen and light and is chemically non-reactive. Mechanistically, adapalene binds like tretinoin to specific retinoic acid nuclear receptors. Adapalene applied cutaneously is comedolytic in the rhino mouse model and also has effects on the abnormal processes of epidermal keratinization and differentiation, both of which are present in the pathogenesis of acne vulgaris. The mode of action of adapalene is suggested to be a normalisation of differentiation of follicular epithelial cells resulting in decreased microcomedone formation. It inhibits the metabolism by lipoxidation of arachidonic acid to pro-inflammatory mediators. The profile suggests that the cell mediated inflammatory component of acne may be modified by adapalene. Studies in human patients provide clinical evidence that cutaneous adapalene is effective in reducing the inflammatory components of acne (papules and pustules). Adapalene removes dead skin cells as well as enhances the follicular penetration of Clindamycin.
PHARMACOKINETICS
Following multiple topical applications of clindamycin phosphate at a concentration equivalent to 10 mg clindamycin per mL in an isopropyl alcohol and water solution, very low levels of clindamycin are present in the serum (0-3 ng/mL) and less than 0.2% of the dose is recovered in urine as clindamycin.

Absorption of adapalene through human skin is low: in clinical trials measurable plasma adapalene levels were not found following chronic cutaneous application to large areas of acneic skin.

There are no data which define the pharmacokinetics of Clincent-A Gel, following topical administration in man.

INDICATIONS
Clincent-A Gel is indicated for topical application in the treatment of mild to moderate inflammatory acne vulgaris as well as non-inflammatory Acne, either alone or in combination with other anti-acne products and for the cutaneous treatment of acne vulgaris where comedones, papules and pustules predominate.

DOSAGE & ADMINISTRATION
Apply a thin film of Clincent-A Gel once daily to the skin where acne lesions appear. Use enough to cover the entire affected area lightly.

CONTRAINDICATIONS
Clincent-A Gel is contraindicated in individuals with a history of hypersensitivity to clindamycin or lincomycin or adapalene, a history of regional enteritis or ulcerative colitis, or a history of antibiotic-associated colitis.

WARNINGS
Use of the topical formulation of clindamycin results in absorption of the antibiotic from the skin surface. Diarrhea, bloody diarrhea, and colitis (including pseudomembranous colitis) have been reported with the use of topical and systemic clindamycin.

Diarrhea, colitis, and pseudomembranous colitis have been observed to begin up to several weeks following cessation of oral and parenteral therapy with clindamycin.

Adapalene should not be used on areas which have cuts or scrapes or on sunburnt skin or in eczema. Contact with the eyes, mouth or angles of the nose and other very sensitive areas of the body should be avoided. If accidental contact does occur, immediately wash with warm water.
Avoid exposure to strong sunlight and artificial UV light. Use of sunscreen products and protective clothing over the treated area is recommended.

Stop the use of Clincent-A Gel in case of sensitivity or irritation.

**PRECAUTIONS**

**General:** Clindamycin should be prescribed with caution in atopic individuals.

**Pregnancy:** Category B: Reproduction studies have been performed in rats and mice using subcutaneous and oral doses of clindamycin ranging from 100 to 600 mg/kg/day and have revealed no evidence of impaired fertility or harm to the fetus due to clindamycin. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, Clindamycin should be used during pregnancy only if clearly needed. Clincent-A gel should not be used during pregnancy.

**Nursing Mothers:** It is not known whether clindamycin is excreted in human milk following use of Clincent Gel. However, orally and parenterally administered clindamycin has been reported to appear in breast milk. Because of the potential for serious adverse reactions in nursing infants, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

Adapalene can be used during breast-feeding.

**Pediatric Use:** Safety and effectiveness of Clincent-A gel in children under the age of 12 have not been established.

**DRUG INTERACTIONS**

Clindamycin has been shown to have neuromuscular blocking properties that may enhance the action of other neuromuscular blocking agents. Therefore, it should be used with caution in patients receiving such agents.

There are no known interactions with other medications which might be used cutaneously and concurrently with Adapalene, however, other retinoids or drugs with a similar mode of action should not be used concurrently with adapalene.

**ADVERSE REACTIONS**

**Local effects:** Burning, itching, dryness, erythema and peeling.

**Systemic effects:** Cases of diarrhea, bloody diarrhea and colitis [including pseudomembranous colitis] have been reported as adverse reactions in patients treated with oral and parenteral formulations of clindamycin and rarely with topical clindamycin. Abdominal pain and
gastrointestinal disturbances as well as gram-negative folliculitis have also been reported in association with the use of topical formulations of clindamycin.

Adapalene may cause the following side effects at the site of application.

**Common:** may affect up to 1 in 10 people

Dry skin, irritation of the skin, burning sensation of the skin, redness of the skin (erythema).

**Uncommon:** may affect up to 1 in 100 people

Local skin reaction (contact dermatitis), skin discomfort, sunburn, itching of the skin (pruritus), peeling skin (exfoliation), flare up of acne.

**PRESENTATION**

**Clincent-A Gel** is available in a tube of 15 g.

**STORAGE**

Store at a temperature not exceeding 25°C. Do not freeze.