CLINDAMYCIN PHOSPHATE- clindamycin phosphate lotion CLINDAMYCIN PHOSPHATE- clindamycin phosphate solution CLINDAMYCIN PHOSPHATE- clindamycin phosphate gel E. Fougera & Co. a division of Fougera Pharmaceuticals Inc.

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Clindamycin Phosphate Topical Solution USP, 1%, Clindamycin Phosphate Gel USP, 1%, Clindamycin Phosphate Lotion (Clindamycin Phosphate Topical Suspension USP, 1%)

**Rx only** 

For External Use.

### DESCRIPTION

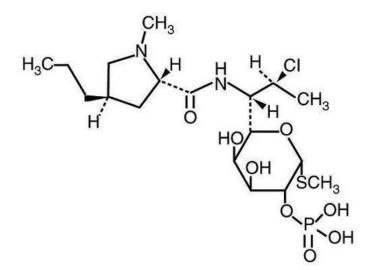
Clindamycin Phosphate Topical Solution and Clindamycin Phosphate Lotion (Clindamycin Phosphate Topical Suspension USP, 1%) contain clindamycin phosphate, USP, at a concentration equivalent to 10 mg clindamycin per milliliter. Clindamycin Phosphate Gel contains clindamycin phosphate, USP, at a concentration equivalent to 10 mg clindamycin per gram. Clindamycin phosphate is a water soluble ester of the semi-synthetic antibiotic produced by a 7(S)-chloro-substitution of the 7(R)-hydroxyl group of the parent antibiotic lincomycin.

The solution contains isopropyl alcohol 50% v/v, propylene glycol, and purified water.

The gel contains allantoin, carbomer 974P, methylparaben, polyethylene glycol 400, propylene glycol, sodium hydroxide, and purified water.

The lotion contains cetostearyl alcohol (2.5%); glycerin; glyceryl stearate SE (with potassium monostearate); isostearyl alcohol (2.5%); methylparaben (0.3%); sodium lauroyl sarcosinate; stearic acid; and purified water.

The structural formula is represented below:



Molecular Formula: C18H34CIN2O8PS

Molecular Weight: 504.97

The chemical name for clindamycin phosphate is Methyl 7-chloro-6,7,8-trideoxy-6-(1-methyl-*trans*-4-propyl-L-2-pyrrolidinecarboxamido)-1-thio-L-*threo*-α-D-*galacto*-octopyranoside 2-(dihydrogen phosphate).

## CLINICAL PHARMACOLOGY

Although clindamycin phosphate is inactive *in vitro*, rapid *in vivo* hydrolysis converts this compound to the antibacterially active clindamycin.

Cross resistance has been demonstrated between clindamycin and lincomycin.

Antagonism has been demonstrated between clindamycin and erythromycin.

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 to 3 ng/mL) and less than 0.2% of the dose is recovered in urine as clindamycin.

Clindamycin activity has been demonstrated in comedones from acne patients. The mean concentration of antibiotic activity in extracted comedones after application of Clindamycin Phosphate Topical Solution for 4 weeks was 597 mcg/g of comedonal material (range 0 to 1,490). Clindamycin *in vitro* inhibits all *Propionibacterium acnes* cultures tested (MICs 0.4 mcg/mL). Free fatty acids on the skin surface have been decreased from approximately 14% to 2% following application of clindamycin.

## INDICATIONS AND USAGE

Clindamycin Phosphate Topical Solution, Clindamycin Phosphate Gel, and Clindamycin Phosphate Lotion are indicated in the treatment of acne vulgaris. In view of the potential for diarrhea, bloody diarrhea and pseudomembranous colitis, the physician should consider whether other agents are more appropriate. (See <u>CONTRAINDICATIONS, WARNINGS</u> and <u>ADVERSE REACTIONS.</u>)

## CONTRAINDICATIONS

Clindamycin Phosphate Topical Solution, Clindamycin Phosphate Gel, and Clindamycin Phosphate Lotion are contraindicated in individuals with a history of hypersensitivity to preparations containing clindamycin or lincomycin, a history of regional enteritis or ulcerative colitis, or a history of antibioticassociated colitis.

## WARNINGS

Orally and parenterally administered clindamycin has been associated with severe colitis which may result in patient death. 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.

Studies indicate a toxin(s) produced by clostridia is one primary cause of antibiotic-associated colitis. The colitis is usually characterized by severe persistent diarrhea and severe abdominal cramps and may be associated with the passage of blood and mucus. Endoscopic examination may reveal pseudomembranous colitis. <u>Stool culture for *Clostridium difficile* and stool assay for *C.* <u>difficile toxin may be helpful diagnostically.</u></u>

When significant diarrhea occurs, the drug should be discontinued. Large bowel endoscopy should be considered to establish a definitive diagnosis in cases of severe diarrhea.

Antiperistaltic agents such as opiates and diphenoxylate with atropine may prolong and/or worsen the condition. Vancomycin has been found to be effective in the treatment of antibiotic-associated pseudomembranous colitis produced by *Clostridium difficile*. The usual adult dosage is 500 mg to 2 grams of vancomycin orally per day in three to four divided doses administered for 7 to 10 days.

<u>Cholestyramine or colestipol resins bind vancomycin *in vitro*. If both a resin and vancomycin are to be administered concurrently, it may be advisable to separate the time of administration of</u>

### each drug.

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

### PRECAUTIONS

**General:** Clindamycin Phosphate Topical Solution contains an alcohol base which will cause burning and irritation of the eye. In the event of accidental contact with sensitive surfaces (eye, abraded skin, mucous membranes), bathe with copious amounts of cool tap water. The solution has an unpleasant taste and caution should be exercised when applying medication around the mouth.

Clindamycin phosphate should be prescribed with caution in atopic individuals.

**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.

**Pregnancy:Teratogenic Effects**—*Pregnancy Category B.* In clinical trials with pregnant women, the systemic administration of clindamycin during the second and third trimesters has not been associated with an increased frequency of congenital abnormalities. There are no adequate studies in pregnant women during the first trimester of pregnancy. Clindamycin should be used during the first trimester of pregnancy only if clearly needed.

**Nursing Mothers:** It is not known whether clindamycin is excreted in human milk following use of clindamycin phosphate. 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.

**Pediatric Use:** Safety and effectiveness in pediatric patients under the age of 12 have not been established.

**Geriatric Use**: Clinical studies for topical Clindamycin products did not include sufficient numbers of subjects aged 65 and over to determine whether they respond differently from younger subjects. Other reported clinical experience has not identified differences in responses between the elderly and younger patients.

## **ADVERSE REACTIONS**

In 18 clinical studies of various formulations of clindamycin phosphate using placebo vehicle and/or active comparator drugs as controls, patients experienced a number of treatment emergent adverse dermatologic events [see table below].

Nu	mber of Patients Re	porting Events	
Treatment Emergent Adverse Event	Solution	Gel	Lotion
	n=553 (%)	n=148 (%)	n=160 (%)
Burning	62 (11)	15 (10)	17 (11)
Itching	36 (7)	15 (10)	17 (11)
Burning/Itching	60 (11)	# (-)	# (-)
Dryness	105 (19)	34 (23)	29 (18)
Erythema	86 (16)	10 (7)	22 (14)
Oiliness/Oily Skin	8 (1)	26 (18)	12* (10)

## Number of Patients Reporting Events

Peeling	61 (11)	# (-)	11 (7)
# not recorded			
* of 126 subjects			

Orally and parenterally administered clindamycin has been associated with severe colitis which may end fatally.

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. (see **WARNINGS**.)

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.

## OVERDOSAGE

Topically applied clindamycin phosphate can be absorbed in sufficient amounts to produce systemic effects. (see **WARNINGS**.)

## DOSAGE AND ADMINISTRATION

Apply a thin film of Clindamycin Phosphate Topical Solution, Clindamycin Phosphate Lotion, or Clindamycin Phosphate Gel twice daily to affected area.

Lotion: Shake well immediately before using.

Keep all liquid dosage forms in containers tightly closed.

## HOW SUPPLIED

Clindamycin Phosphate Topical Solution, USP 1% containing clindamycin phosphate equivalent to 10 mg clindamycin per milliliter is available in the following sizes:

30 mL applicator bottle NDC 0168-0201-30 60 mL applicator bottle NDC 0168-0201-60

Clindamycin Phosphate Gel, USP 1% containing clindamycin phosphate equivalent to 10 mg clindamycin per gram is available in the following sizes:

30 gram tube NDC 0168-0202-30 60 gram tube NDC 0168-0202-60

Clindamycin Phosphate Lotion (Clindamycin Phosphate Topical Suspension, USP 1%) containing clindamycin phosphate equivalent to 10 mg clindamycin per milliliter is available in the following size:

60 mL bottle NDC 0168-0203-60

Store at 20° to 25°C (68° to 77°F). [See USP Controlled Room Temperature]. Protect from freezing.

### Fougera PHARMACEUTICALS INC.

E. FOUGERA & CO. A division of Fougera Pharmaceuticals Inc. MELVILLE, NEW YORK 11747

I201C/IF201C R07/14 #90

### PACKAGE LABEL - PRINCIPAL DISPLAY PANEL - 60 mL CONTAINER

NDC 0168-0203-60

Fougera<sup>®</sup>

CLINDAMYCIN PHOSPHATE LOTION (Clindamycin Phosphate Topical Suspension USP, 1%)

# Equivalent to 1% (10 mg/mL) clindamycin

## FOR TOPICAL USE ONLY. 60 mL

Rx only

E. FOUGERA & CO. A division of Fougera Pharmaceuticals Inc. Melville, New York 11747



### PACKAGE LABEL – PRINCIPAL DISPLAY PANEL – 60 mL CARTON

NDC 0168-0203-60

Fougera<sup>®</sup>

CLINDAMYCIN PHOSPHATE LOTION (Clindamycin Phosphate Topical Suspension USP, 1%)

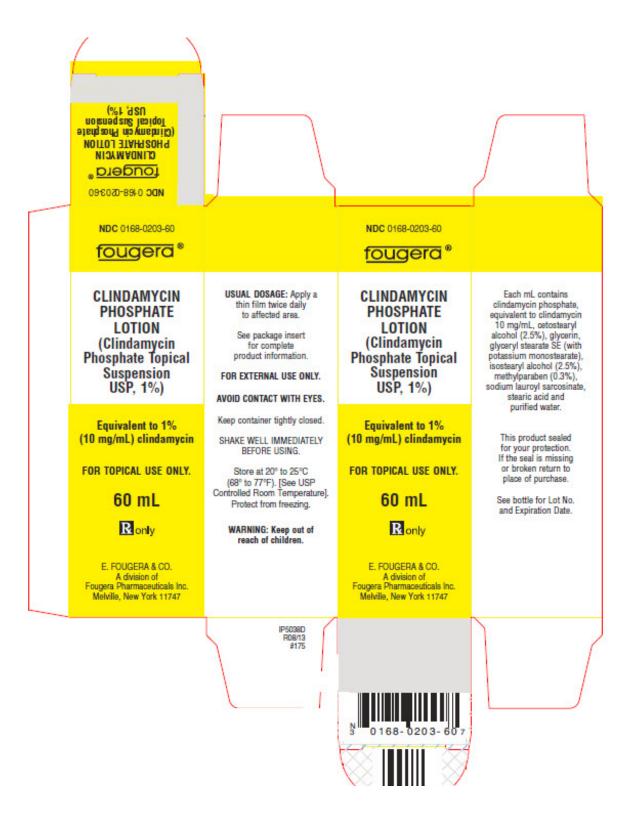
Equivalent to 1% (10 mg/mL) clindamycin

## FOR TOPICAL USE ONLY.

60 mL

Rx only

E. FOUGERA & CO. A division of Fougera Pharmaceuticals Inc. Melville, New York 11747



### PACKAGE LABEL – PRINCIPAL DISPLAY PANEL – 60 mL CONTAINER

NDC 0168-0201-60

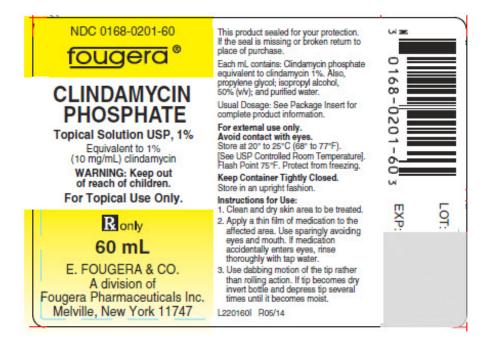
Fougera<sup>®</sup>

CLINDAMYCIN PHOSPHATE Topical Solution USP, 1% Equivalent to 1% (10 mg/mL) clindamycin WARNING: Keep out

### of reach of children. For Topical Use Only.

Rx only 60 mL

E. FOUGERA & CO. A division of Fougera Pharmaceuticals Inc. Melville, New York 11747



## PACKAGE LABEL – PRINCIPAL DISPLAY PANEL – 60 mL CARTON

NDC 0168-0201-60

Fougera<sup>®</sup>

CLINDAMYCIN PHOSPHATE Topical Solution USP, 1%

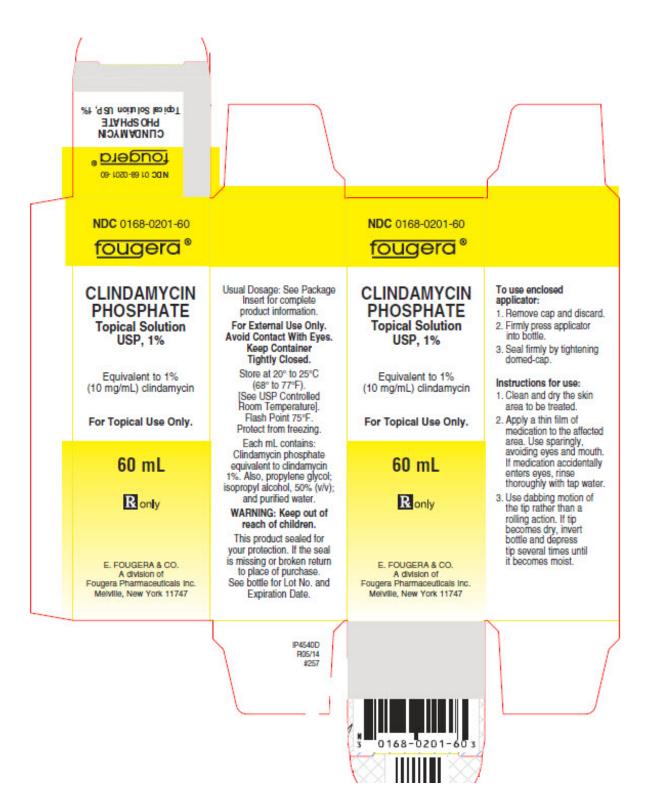
Equivalent to 1% (10 mg/mL) clindamycin

### For Topical Use Only.

60 mL

Rx only

E. FOUGERA & CO. A division of Fougera Pharmaceuticals Inc. Melville, New York 11747



### PACKAGE LABEL – PRINCIPAL DISPLAY PANEL – 30 G CONTAINER

### NDC 0168-0202-30

### Fougera<sup>®</sup>

### CLINDAMYCIN PHOSPHATE GEL USP, 1% equivalent to 1% clindamycin

For Topical Use Only.

Rx only



## PACKAGE LABEL - PRINCIPAL DISPLAY PANEL - 30 G CARTON

NDC 0168-0202-30

Rx only

Fougera<sup>®</sup>

**CLINDAMYCIN PHOSPHATE GEL USP, 1%** equivalent to 1% clindamycin For Topical Use Only.

FOR EXTERNAL USE ONLY. AVOID CONTACT WITH EYES. WARNING: Keep out of reach of children.

NET WT 30 grams

N 0168-0202-30 3	See crimp of tube for Control No. and Exp. Date.	Deration 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
NDC 0168-0202-30 fougera® CLINDAMYCIN PHOSPHATE GEL USP, 1% equivalent to 1% clindamycin For Topical Use Only.	FOR EXTERNAL USE ONLY. AVOID CONTACT WITH EYES. WARNING: Keep out of reach of children. NET WT 30 grams	NDC 0188-0202-30 FOUGETG * CLINDAMYCIN PHOSPHATE GEL USP, 1%
Usual Dosage: Apply a thin film twice daily to affected area. See package insert for complete product information. Store at 20° to 25°C (68° to 77°F). [See USP Controlled Room Temperature]. Protect from freezing. IMPORTANT: The opening of this product is covered by a metal tamper-resistant seal. If this seal has been punctured or is not visible, do not use and return product to place of purchase. E. FOUGERA & CO. A division of Fougera Pharmaceuticals Inc., Melville, New York 11747	TO OPEN: To puncture the seal, reverse the cap and place the puncture-top onto the tube. Push down firmly until seal is open. TO CLOSE: Screw the cap back onto the tube.	
NDC 0168-0202-30 fougera® CLINDAMYCIN PHOSPHATE GEL USP, 1% equivalent to 1% clindamycin For Topical Use Only.	Each gram contains: Clindamycin phosphate equivalent to clindamycin 10 mg (1%). Also, allantoin, carbomer 974P, methylparaben, polyethylene glycol 400, propylene glycol, sodium hydroxide, and purified water. <b>NET WT 30 grams</b>	

CLINDAMYCIN PHOSP	HATE			
clindamycin phosphate lotion				
Product Information				
Product Type	HUMAN PRESCRIPTION DRUG LABEL	Item Code (Source)		NDC:0168- 0203
Route of Administration	TOPICAL	DEA Schedule		
Active Ingredient/Active Moi	ety			
Ingredien	t Name	Basis of Strength		Strength
CLINDAMYCIN PHO SPHATE (CLINDA	AMYCIN)	CLINDAMYCIN	10 mg	in 1 mL
Inactive Ingredients				
	Ingredient Name		Str	ength
CETOSTEARYL ALCOHOL				
GLYCERIN				
GLYCERYL MONOSTEARATE				
ISOSTEARYL ALCOHOL				
METHYLPARABEN				
SODIUM LAURO YL SARCO SINATE				
STEARIC ACID				
WATER				

#	Item Code	Package Description	Marketi	ng Start Date	Ma	arketing End Date
1 NDC	2:0168-0203-60	1 in 1 CARTON				
L		60 mL in 1 BOTTLE				
Mar	keting Info	rmation				
	<b>keting Info</b>		ograph Citation	Marketing Start	Date	Marketing End Date
	eting Category	rmation Application Number or Mon ANDA065067	ograph Citation	<b>Marketing Start</b> 01/31/2002	Date	Marketing End Date

	e solution					
Product Informati	on					
Product Type		HUMAN PRESCRIPTION LABEL	I DRUG	Item Code (So	ource)	NDC:0168- 0201
Route of Administrati	ion	TOPICAL		DEA Schedule	2	
Active Ingredient/	Active Moi	ety				
	Ingredien	t Name		Basis of S	strength	Strength
CLINDAMYCIN PHO SP	HATE (CLIND	AMYCIN)	(	CLINDAMYCIN		10 mg in 1 mL
PROPYLENE GLYCOL						
WATER						
Packaging	Pac	kage Description	Marke	ting Start Dat	e Ma	arketing End Date
Packaging # Item Code	1 in 1 CA	RTON	Marke	ting Start Dat	e Ma	arketing End Date
Fackaging           Item Code           NDC:0168-0201-30           I	1 in 1 CA 30 mL in	RTON 1 BOTTLE	Marke	ting Start Dat	e Ma	arketing End Date
Packaging         Item Code         1       NDC:0168-0201-30         1       NDC:0168-0201-60	1 in 1 CA 30 mL in 1 in 1 CA	RTON 1 BOTTLE RTON	Marke	ting Start Dat	e Ma	arketing End Date
Particular Set	1 in 1 CA 30 mL in 1 in 1 CA	RTON 1 BOTTLE	Marke	ting Start Dat	e Ma	arketing End Date
Packaging         Item Code         NDC:0168-0201-30         DC:0168-0201-60         NDC:0168-0201-60	1 in 1 CA 30 mL in 1 in 1 CA 60 mL in	RTON 1 BOTTLE RTON	Marke	ting Start Dat	e Ma	arketing End Date
<ul> <li>Warketing Category</li> </ul>	1 in 1 CA 30 mL in 1 in 1 CA 60 mL in	RTON 1 BOTTLE RTON			e Ma	arketing End Date Marketing End Date

rr	duct Informatio	n					
Pro	duct T yp e		HUMAN PRESCRIPTION LABEL	DRUG I	item Code (Source)		NDC:0168- 0202
Rou	te of Administratio	n	TOPICAL	]	DEA Schedule		
Act	ive Ingredient/A	Active Moi	ety				
	0	Ingredie	•		Basis of Strer	igth	Strength
CLI	NDAMYCIN PHO SPH	-			CLINDAMYCIN	J	10 mg in 1 g
Ina	ctive Ingredient	s					
Ind	cuve ingreatent	5	Ingredient Na	ame			Strengtl
ALL	ANTOIN						
	HYLPARABEN						
	YETHYLENE GLYC	OL 400					
	PYLENE GLYCOL						
	IUM HYDRO XIDE						
WAT		VMED TVDE	B (ALLYL PENTAERYT		OSSI INIZED)		
CAR							
	kaging						
Pac		Pac	kage Description	Market	ing Start Date	Mark	eting End Date
Pac #	kaging	<b>Pac</b> 1 in 1 CA		Market	ing Start Date	Mark	eting End Date
Pac # 1 N1	<b>kaging</b> Item Code DC:0168-0202-30	1 in 1 CA 30 g in 1	RTON TUBE	Market	ing Start Date	Mark	eting End Date
Pac # 1	kaging Item Code	1 in 1 CA 30 g in 1 1 in 1 CA	RTON TUBE RTON	Market	ing Start Date	Mark	eting End Date
Pac # 1 1 N1 1 2 N1	<b>kaging</b> Item Code DC:0168-0202-30	1 in 1 CA 30 g in 1	RTON TUBE RTON	Market	ing Start Date	Mark	eting End Date
Pac # 1 1 N1 2 N1 2	<b>kaging</b> <b>Item Code</b> DC:0168-0202-30 DC:0168-0202-60	1 in 1 CA 30 g in 1 1 in 1 CA 60 g in 1	RTON TUBE RTON	Market	ing Start Date	Mark	eting End Date
Pac # 1 1 N1 2 N1 2 N1 2	<b>kaging</b> Item Code DC:0168-0202-30	1 in 1 CA 30 g in 1 1 in 1 CA 60 g in 1	RTON TUBE RTON		ing Start Date Marketing Start		eting End Date arketing End Dat

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