ORALTAG- iohexol for solution
Interpharma Praha, a.s.

HIGHLIGHTS OF PRESCRIBING INFORMATION
These highlights do not include all the information needed to use ORALTAG safely and effectively. See full prescribing information for ORALTAG.

ORALTAG™ (iohexol) for oral solution

Initial U.S. Approval: 1985

INDICATIONS AND USAGE

Oraltag is a radiographic contrast agent indicated for use in opacification of the gastrointestinal tract during computed tomography (CT) of the abdomen and pelvis (1)

Limitations of Use

Not indicated for diagnostic examination of the gastrointestinal tract (1)

DOSAGE AND ADMINISTRATION

For oral use only:

- Adults: 1 to 2 bottles (4.5 g to 9 g iodine (I)) (2)
- Pediatric patients 3 to 18 years of age: less than 1 bottle to 2 bottles (less than 4.5 gI up to 9 gI) (2)
- Pediatric patients less than 3 years of age: up to 1 bottle (4.5 gI) (2)

DOSAGE FORMS AND STRENGTHS

For oral solution: Each single use bottle contains 9.7 g iohexol (equivalent to 4.5 g carbon bound iodine) (3)

CONTRAINDICATIONS

Hypersensitivity to iodinated contrast agents, including iohexol (4)

WARNINGS AND PRECAUTIONS

- Hypersensitivity reactions: life-threatening or fatal reactions can occur. Resuscitation equipment and personnel should be available (5.2)
- Thyroid function test alterations: Oraltag may alter tests which depend on iodine estimation. Perform such tests prior to Oraltag administration (5.3)

ADVERSE REACTIONS

The most common adverse reactions (incidence < 2%) are nausea, vomiting, and diarrhea (6)

To report SUSPECTED ADVERSE REACTIONS, contact Interpharma Praha at 1-877-886-7040 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.
See 17 for PATIENT COUNSELING INFORMATION.

Revised: 4/2015

FULL PRESCRIBING INFORMATION: CONTENTS*

* Sections or subsections omitted from the full prescribing information are not listed.

FULL PRESCRIBING INFORMATION

1 INDICATIONS AND USAGE

Oraltag is indicated for use in computed tomography of the abdomen and pelvis to opacify bowel loops and delineate between normal loops and adjacent organs or areas of suspected pathology.

Limitations of Use

Oraltag is not indicated for diagnostic examination of the gastrointestinal tract.

2 DOSAGE AND ADMINISTRATION

2.1 Recommended Dosing

For oral use only*[see Warnings and Precautions (5.1)]*

Refer to Table 1 for dosing information.

Table 1 Dosing Guidelines for Oraltag

Patient Age	Recommended Dose*	Volume of Prepared Solution to Administer (at a concentration of 9 mgI per mL)	Maximum Total Iodine Dose
Adults	Administer 4.5 g to 9 g of iodine (1 to 2 bottles of prepared solution), orally	500 mL to 1000 mL	9 grams

3 to 18 years of age	Administer up to 9 g of iodine (from less than 1 bottle up to 2 bottles of prepared solution), orally	280 mL to 750 mL, depending on size of patient	9 grams
Less than 3 years of age	Administer up to 4.5 g of iodine (portion of 1 bottle of prepared solution), orally	120 mL to 300 mL, depending on size of patient	4.5 grams
* Total volume of Oraltag administered will vary depending on the size of the patient			

The variables of patient age, weight, or medical condition, may require adjustment of the concentration and/or volume of solution to be prepared for administration. If it is anticipated that the patient will have difficulty in consuming the required volume, a higher concentration of solution (up to 21 mgI per mL) can be prepared and a smaller volume administered (see Table 2).

Table 2 Preparation of Higher Concentrations of Oraltag at Lower Volumes

For Final Concentration (mgI/mL)	**Add Water or a Beverage* to the Indicated Mark on the Bottle (mL)**
9	500
12	375
15	300
18	250
21	214
* Examples include infant formula, milk, juice, carbonated beverage or a sports drink	

2.2 Preparation and Administration Instructions

- Reconstitute Oraltag, supplied as a powder in a single use bottle, with water or other beverages just before its use
- Do not mix other pharmaceuticals with Oraltag
- Use the 5 fill lines premolded and labeled on the bottle to determine the volume for the 5 target concentrations (9, 12, 15, 18, and 21 mgI/mL)
- Administer Oraltag 20 to 60 minutes before image acquisition
- Protect prepared solution from strong daylight and direct exposure to sunlight
- Discard any unused portions

3 DOSAGE FORMS AND STRENGTHS

For oral solution: Oraltag is provided as a white to off-white powder of 9.7 g iohexol, (equivalent to 4.5 g of carbon bound iodine) in a single-use bottle.

4 CONTRAINDICATIONS

Oraltag is contraindicated in patients with a known hypersensitivity to iodinated contrast agents, including iohexol *[see Warnings and Precautions (5.2)]*.

5 WARNINGS AND PRECAUTIONS

5.1 Risks Associated with Inadvertent Parenteral Administration

Oraltag is not a sterile product and is not suitable for a parenteral route of administration. Serious adverse reactions such as sepsis can occur if administered parenterally. Do not administer Oraltag parenterally.

5.2 Hypersensitivity Reactions

Administration of Oraltag can cause life-threatening hypersensitivity reactions including anaphylaxis *[see Contraindications (4)]*. Patients at increased risk include those with a previous reaction to an iodinated contrast agent and allergic disorders (i.e., bronchial asthma, allergic rhinitis, and food allergies). Emergency resuscitation equipment and trained personnel should be available.

5.3 Alteration of Thyroid Function Tests

Iodinated contrast agents may alter the results of thyroid function tests which depend on iodine estimation, e.g., radioactive iodine uptake test. Therefore, such testing, if indicated, should be performed prior to the administration of this preparation.

6 ADVERSE REACTIONS

The following adverse reactions are described in greater detail in other sections:

- Hypersensitivity reactions *[see Warnings and Precautions (5.2)]*

6.1 Clinical Trials Experience

In studies involving 44 adult and 69 pediatric patients who received oral and intravenous iohexol for CT examinations of the abdomen, two reports of vomiting (2%) were noted.

6.2 Postmarketing Experience

Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure.

The following adverse reactions have been reported following oral administration of the dilute, hypotonic solutions of iohexol (9 mgI/mL to 21 mgI/mL):

- Gastrointestinal: nausea, diarrhea

8 USE IN SPECIFIC POPULATIONS

8.1 Pregnancy

Risk Summary

There are no human data on risks associated with the use of Oraltag during pregnancy. The background risk in the U.S. general population of major birth defects is 2% to 4% and risk of miscarriage is 15% to 20% of clinically recognized pregnancies. In animal reproduction studies, no evidence of fetal harm

was observed with intravenous administration of iohexol to rats and rabbits at doses up to 100 times the maximum recommended human intravenous dose.

8.2 Lactation

Risk Summary

Iohexol administered intravenously is present in human milk at concentrations approximately 0.5% of the maternal dose; however, it is not known to what extent iohexol administered orally is present in human milk. Iodinated contrast is poorly excreted into human milk and is poorly absorbed by the gastrointestinal tract of a breastfed infant. The developmental and health benefits of breastfeeding should be considered along with the mother's clinical need for Oraltag and any potential adverse effects on the breastfed infant from Oraltag.

Clinical Considerations

Interruption of breastfeeding after exposure to iodinated contrast media is not necessary because the potential exposure of the breastfed infant to iodine is small. However, a lactating woman may consider interrupting breastfeeding and pumping and discarding breast milk for 10 hours (approximately 5 half-lives) after Oraltag administration in order to minimize potential drug exposure to a breastfed infant.

8.4 Pediatric Use

The safety and effectiveness of oral iohexol have been established in pediatric patients.

8.5 Geriatric Use

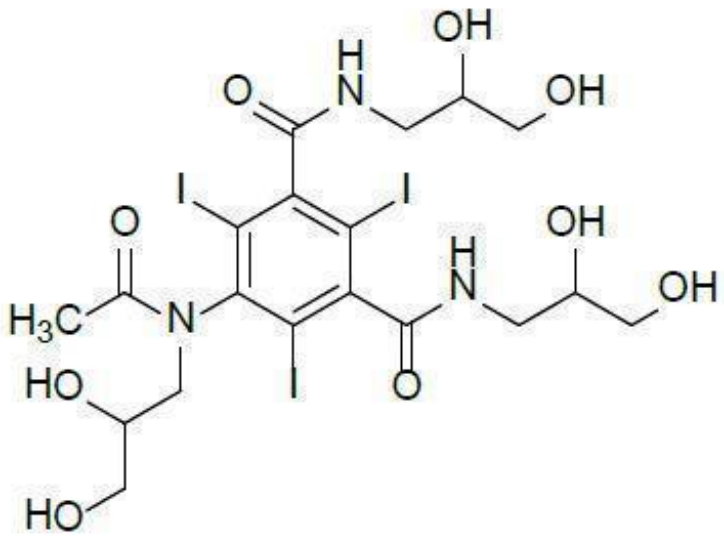
In general, dose selection for an elderly patient should be cautious, usually starting at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy.

11 DESCRIPTION

Oraltag (iohexol) is a radiographic contrast agent for oral solution. Oraltag is provided as a nonsterile white to off-white powder with 9.7 g iohexol (equivalent to 4.5 g of carbon bound iodine) in a 20-ounce beverage bottle. Each bottle is individually sealed in a foil laminated pouch. Oraltag consists of 100 percent iohexol and contains no excipients.

Iohexol is designated chemically as N,N´-bis(2,3-dihydroxypropyl)-5-[N-(2,3-dihydroxypropyl)acetamido]-2,4,6-triiodoisophthalamide. It is a nonionic, water-soluble iodinated contrast medium with a molecular weight of 821.14 (carbon bound iodine content 46.36%). In aqueous solution each triiodinated molecule remains undissociated.

The chemical structure is:



Oraltag, when prepared at a concentration of 9 mgI/mL in water, has an osmolality of 30 mOsmol/kg water. The calculated osmolality of 21 mgI/mL in water is 55 mOsmol/kg water. The prepared solutions are hypotonic.

12 CLINICAL PHARMACOLOGY

12.1 Mechanism of Action

Iohexol enhances imaging due to its high iodine content attenuating the beam of X-rays during CT examinations. Different tissues within the body attenuate X-rays to different degrees, and oral administration of iohexol allows for enhanced visualization due to the iodine present in bowel loops.

12.3 Pharmacokinetics

Orally administered iohexol is very poorly absorbed from the normal gastrointestinal tract. Only 0.1 to 0.5% of the oral dose is excreted by the kidneys. This amount may increase in the presence of bowel perforation, bowel obstruction, or severe inflammatory bowel disease.

Iohexol displays a low affinity for serum or plasma proteins and is poorly bound to serum albumin. No significant metabolism, deiodination or biotransformation occurs.

13 NONCLINICAL TOXICOLOGY

13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

No long-term animal studies have been performed to evaluate carcinogenic potential or mutagenesis.

In animal reproduction studies, no evidence of impaired fertility was observed with intravenous administration of iohexol to rats and rabbits at doses up to 100 times the maximum recommended human intravenous dose.

16 HOW SUPPLIED/STORAGE AND HANDLING

How Supplied

Oraltag is supplied as a nonsterile white to off-white powder for oral solution in a single-use 20-ounce polyethylene terephthalate beverage bottle closed with a lined polypropylene cap. Each bottle is packaged in a sealed foil pouch.

Twelve (12) bottles per pack (NDC 54702-501-52).

Twenty-five (25) bottles per pack (NDC 54702-501-62).

Storage

Store at controlled room temperature, 20° to 25°C (68° to 77°F); excursions permitted to 15° to 30°C (59° to 86°F) [see USP Controlled Room Temperature].

Protect prepared solutions of Oraltag from strong daylight and direct exposure to sunlight.

Do not use if tamper-evident foil pouch has been opened.

17 PATIENT COUNSELING INFORMATION

Hypersensitivity Reactions

Advise patients about the risk of hypersensitivity reactions to Oraltag and the need to notify their healthcare provider if signs or symptoms of hypersensitivity reaction occur *[see Warnings and Precautions (5.2)]*.

Manufactured for Interpharma Praha, a.s., Prague, Czech Republic by Ultra Seal Corporation, New Paltz, New York.

PRINCIPAL DISPLAY PANEL - 9.7 g Bottle Label

NDC 54702-501-21

Oraltag™

(iohexol) for oral solution

9.7 g of iohexol powder
(equivalent to 4.5 g of carbon bound iodine)

Single Use Bottle - Discard Unused Portion

Prepared solution is 9-21 mgI/mL

For Oral Use Only
Nonsterile

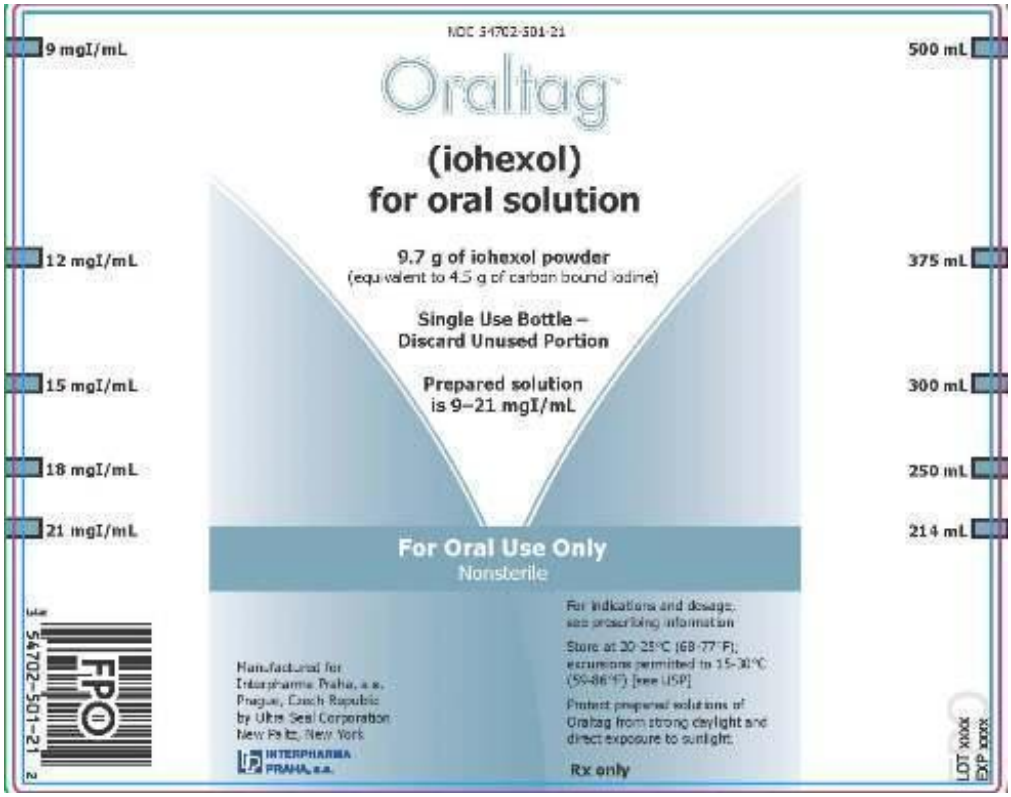
For indications and dosage, see prescribing information.

Store at 20-25˚C (68-77˚F); excursions permitted to 15-30˚C (59-86˚F) [see USP]

Protect prepared solutions of Oraltag from strong daylight and direct exposure to sunlight.

Rx Only

Manufactured for Interpharma Praha, a.s.
Prague, Czech Republic
by Ultra Seal Corporation
New Paltz, New York



PRINCIPAL DISPLAY PANEL - Foil Pouch Label

NDC 54702-501-51

Oraltag™

(iohexol) for oral solution

Contains a single-use bottle with 9.7 g of iohexol powder
(equivalent to 4.5 g of carbon bound iodine)

For Oral Use Only
Nonsterile

Store at 20-25˚C (68-77˚F); excursions permitted to 15-30˚C (59-86˚F) [see USP]

Rx Only

Manufactured for Interpharma Praha, a.s.
Prague, Czech Republic
by Ultra Seal Corporation
New Paltz, New York

Instructions for Use:

1. Add water or beverage up to the fill line on the bottle as prescribed for the patient. Prepare one or two bottles as directed.

2. Replace cap and shake until all the powder has dissolved.

3. The dose is ready to be consumed by the patient.

4. Discard any unused portion.

NDC 54702-501-51

3 54702 50151 9

Lot: XXXXXXX Exp

Oraltag™

(iohexol) for oral solution

Contains a single-use bottle with 9.7 g of iohexol powder (equivalent to 4.5 g of carbon bound iodine)

For Oral Use Only
Nonsterile

Manufactured for
Interpharma Praha, a.s.
Prague, Czech Republic
by Ultra Seal Corporation
New Paltz, New York

INTERPHARMA PRAHA, a.s.

Store at 20-25°C (68-77°F); excursions permitted to 15-30°C (59-86°F) [see USP]

Rx ONLY

TEAR HERE

TEAR HERE

Oraltag

(iohexol)
for oral solution

Instructions for Use:

1. **Add water or beverage up to the fill line on the bottle as prescribed for the patient. Prepare one or two bottles as directed.**

2. **Replace cap and shake until all the powder has dissolved.**

3. **The dose is ready to be consumed by the patient.**

4. **Discard any unused portion.**

ORALTAG

iohexol for solution

Product Information			
Product Type	HUMAN PRESCRIPTION DRUG	**Item Code (Source)**	NDC:54702-501
Route of Administration	ORAL		

Active Ingredient/Active Moiety		
Ingredient Name	**Basis of Strength**	**Strength**
IOHEXOL (UNII: 4419T9MX03) (IOHEXOL - UNII:4419T9MX03)	IODINE	4.5 g

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:54702-501-52	12 in 1 CASE	07/01/2016	
1	NDC:54702-501-51	1 in 1 POUCH		
1	NDC:54702-501-21	1 in 1 BOTTLE, PLASTIC; Type 0: Not a Combination Product		
2	NDC:54702-501-62	25 in 1 CASE	07/01/2016	
2	NDC:54702-501-51	1 in 1 POUCH		
2	NDC:54702-501-21	1 in 1 BOTTLE, PLASTIC; Type 0: Not a Combination Product		
3	NDC:54702-501-98	12 in 1 CASE	07/01/2016	
3	NDC:54702-501-99	1 in 1 POUCH		
3	NDC:54702-501-21	1 in 1 BOTTLE, PLASTIC; Type 0: Not a Combination Product		

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
NDA	NDA205383	07/01/2016	

Labeler - Interpharma Praha, a.s. (644354706)

Establishment

Name	Address	ID/FEI	Business Operations
Ultra Seal Corporation		085752004	pack(54702-501) , label(54702-501)

Establishment

Name	Address	ID/FEI	Business Operations
Interpharma Praha, a.s.		644354706	api manufacture(54702-501) , analysis(54702-501) , manufacture(54702-501)

Revised: 12/2020 Interpharma Praha, a.s.