ISOSULFAN BLUE- isosulfan blue injection, solution
Meitheal Pharmaceuticals Inc.

HIGHLIGHTS OF PRESCRIBING INFORMATION
These highlights do not include all the information needed to use ISOSULFAN BLUE INJECTION safely and effectively. See full prescribing information for ISOSULFAN BLUE INJECTION.
ISOSULFAN BLUE injection, for subcutaneous use
Initial U.S. Approval: 1981

INDICATIONS AND USAGE

Isosulfan Blue Injection 1% upon subcutaneous administration, delineates the lymphatic vessels draining the region of injection. It is an adjunct to lymphography in: primary and secondary lymphedema of the extremities; chyluria, chylous ascites or chylothorax; lymph node involvement by primary or secondary neoplasm; lymph node response to therapeutic modalities (1.1).

DOSAGE AND ADMINISTRATION

Isosulfan blue injection 1% is to be administered subcutaneously, one-half (1/2) mL into three (3) interdigital spaces of each extremity per study. A maximum dose of 3 mL (30 mg) isosulfan blue is, therefore, injected (2.1).

DOSAGE FORMS AND STRENGTHS

1% aqueous solution (isosulfan blue) (3)

CONTRAINDICATIONS

Hypersensitivity to triphenylmethane or related compounds (4).

WARNINGS AND PRECAUTIONS

- Life-threatening anaphylactic reactions have occurred after isosulfan blue 1% administration. Monitor patients closely for at least 60 minutes after administration of isosulfan blue 1% (5.1).
- The admixture of isosulfan blue 1% with local anesthetics results in an immediate precipitation of 4-9% drug complex. Use a separate syringe for anesthetics (5.2).
- Isosulfan blue 1% interferes with measurements in peripheral blood pulse oximetry. Arterial blood gas analysis may be needed (5.3).

ADVERSE REACTIONS

Hypersensitivity Reactions: Hypersensitivity reactions occurring approximately 2% of patients and include life-threatening anaphylactic reactions with respiratory distress, shock, angioedema, urticaria, pruritus. A death has been reported following IV administration of a similar compound (6).
To report SUSPECTED ADVERSE REACTIONS, contact Meitheal Pharmaceuticals Inc. at 1-844-824-8426 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

DRUG INTERACTIONS

No drug interactions have been identified for isosulfan blue 1% (7).

USE IN SPECIFIC POPULATIONS

- Caution should be exercised when isosulfan blue 1% is administered to nursing mothers (8.3).
- Safety and effectiveness of isosulfan blue 1% in children have not been established (8.4).

See 17 for PATIENT COUNSELING INFORMATION.

Revised: 8/2020

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FULL PRESCRIBING INFORMATION

1 INDICATIONS AND USAGE

1.1 Lymphatic Vessel Delineation

Isosulfan Blue Injection 1% upon subcutaneous administration, delineates lymphatic vessels draining the region of injection. It is an adjunct to lymphography in: primary and secondary lymphedema of the extremities; chyluria, chylous ascites or chylothorax; lymph node involvement by primary or secondary neoplasm; and lymph node response to therapeutic modalities.

2 DOSAGE AND ADMINISTRATION

2.1 Subcutaneous Administration

Isosulfan blue injection 1% is to be administered subcutaneously, one-half (1/2) mL into three (3) interdigital spaces of each extremity per study. A maximum dose of 3 mL (30 mg) isosulfan blue is, therefore, injected.

3 DOSAGE FORMS AND STRENGTHS

1% aqueous solution (isosulfan blue)

4 CONTRAINDICATIONS

Isosulfan blue 1% is contraindicated in those individuals with known hypersensitivity to triphenylmethane or related compounds.

5 WARNINGS AND PRECAUTIONS

5.1 Hypersensitivity Reactions

Life-threatening anaphylactic reactions (respiratory distress, shock, angioedema) have occurred after isosulfan blue 1% administration. Reactions are more likely to occur in patients with a history of bronchial asthma, allergies, drug reactions or previous reactions to triphenylmethane dyes. Monitor patients closely for at least 60 minutes after administration of isosulfan blue 1%. Trained personnel should be available to administer emergency care including resuscitation.

5.2 Precipitation of Isosulfan Blue 1% by Lidocaine

The admixture of isosulfan blue 1% (with local anesthetics (i.e. lidocaine)) in the same syringe results in an immediate precipitation of 4–9% drug complex. Use a separate syringe to administer a local anesthetic.

5.3 Interference with Oxygen Saturation and Methemoglobin Measurements

Isosulfan blue 1% interferes with measurements of oxygen saturation in peripheral blood by pulse oximetry and can cause falsely low readings. The interference effect is maximal at 30 minutes and minimal generally by four hours after administration. Arterial blood gas analysis may be needed to verify decreased arterial partial pressure of oxygen.

Isosulfan blue 1% may also cause falsely elevated readings of methemoglobin by arterial blood gas analyzer. Therefore, co-oximetry may be needed to verify methemoglobin level.

6 ADVERSE REACTIONS

6.1 Postmarketing Experience

Hypersensitivity Reactions: Case series report an overall incidence of hypersensitivity reactions in approximately 2% of patients. Life-threatening anaphylactic reactions have occurred. Manifestations include respiratory distress, shock, angioedema, urticaria, pruritus. A death has been reported following administration of a similar compound employed to estimate the depth of a severe burn. Reactions are more likely to occur in patients with a personal or family history of bronchial asthma, significant allergies, drug reactions or previous reactions to triphenylmethane dyes *[see Warnings and Precautions (5)]*.

Laboratory tests: Isosulfan blue 1% interferes with measurements of oxygen saturation by pulse oximetry and of methemoglobin by gas analyzer *[see Warnings and Precautions*

(5)].

Skin: Transient or long-term (tattooing) blue coloration.

7 DRUG INTERACTIONS

No drug interactions have been identified with isosulfan blue 1%.

8 USE IN SPECIFIC POPULATIONS

8.3 Nursing Mothers

It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when isosulfan blue 1% is administered to a nursing mother.

8.4 Pediatric Use

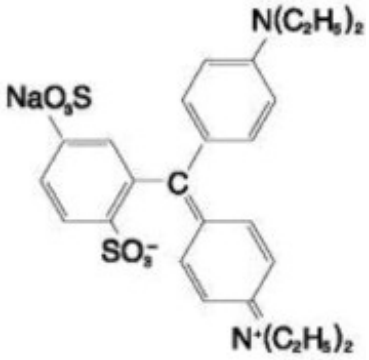
Safety and effectiveness of isosulfan blue 1% in children have not been established.

10 OVERDOSAGE

Do not exceed indicated recommended dosage as overdosage levels have not been identified for isosulfan blue 1%.

11 DESCRIPTION

The chemical name of Isosulfan Blue Injection 1% is N-[4-[[4-(diethylamino)phenyl] (2,5-disulfophenyl) methylene]-2,5-cyclohexadien-1-ylidene]-N-ethylethanaminium hydroxide, inner salt, sodium salt. Its structural formula is:



Isosulfan Blue Injection 1% is a sterile aqueous solution for subcutaneous administration. Phosphate buffer in sterile, nonpyrogenic water is added in sufficient quantity to yield a final pH of 6.8 to 7.4. Each mL of solution contains 10 mg isosulfan blue, 6.6 mg dibasic sodium phosphate, anhydrous and 2.7 mg monobasic potassium phosphate. The solution contains no preservative. Isosulfan Blue Injection 1% is a contrast agent for the delineation of lymphatic vessels.

12 CLINICAL PHARMACOLOGY

12.2 Pharmacodynamics

Following subcutaneous administration, isosulfan blue 1% binds to serum proteins and is picked up by the lymphatic vessels. Thus, the lymphatic vessels are delineated by the blue dye.

12.3 Pharmacokinetics

Up to 10% of the subcutaneously administered dose of isosulfan blue 1% is excreted unchanged in the urine in 24 hours in human.

13 NONCLINICAL TOXICOLOGY

13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

Long-term studies in animals have not been performed to evaluate the carcinogenic potential of isosulfan blue 1%. Reproduction studies in animals have not been conducted and, therefore, it is unknown if a problem concerning mutagenesis or impairment of fertility in either males or females exists.

13.2 Teratogenic Effects

Pregnancy Category C. Animal reproduction studies have not been conducted with isosulfan blue 1%. It is not known whether isosulfan blue 1% can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Isosulfan blue 1% should be given to a pregnant woman only if clearly needed.

16 HOW SUPPLIED/STORAGE AND HANDLING

Isosulfan Blue Injection 1% is a dark blue aqueous solution in a phosphate buffer. It is supplied as follows:

NDC	Isosulfan Blue Injection 1%	Package Factor
71288-**805**-06	50 mg per 5 mL Single-Dose Vial	6 vials per carton

Storage

Store at 20° to 25°C (68° to 77°F). [See USP Controlled Room Temperature.] Avoid excessive heat.

Discard unused portion.

Sterile, Nonpyrogenic, Preservative-free.
The container closure is not made with natural rubber latex.

17 PATIENT COUNSELING INFORMATION

Inform patients that urine color may be blue for 24 hours following administration of

isosulfan blue 1%.

meitheal®
Mfd. for Meitheal Pharmaceuticals
Chicago, IL 60631 (USA)

August 2020

810061-00

PRINCIPAL DISPLAY PANEL – Isosulfan Blue Injection 1% 5 mL Vial Label

NDC 71288-**805**-05

Rx Only

Isosulfan Blue Injection 1%

50 mg per 5 mL

(10 mg per mL)

For Lymphography

For Subcutaneous Use Only

5 mL Single-Dose Vial

PRINCIPAL DISPLAY PANEL – Isosulfan Blue Injection 1% 5 mL Carton

NDC 71288-**805**-06

Rx Only

Isosulfan Blue Injection 1%

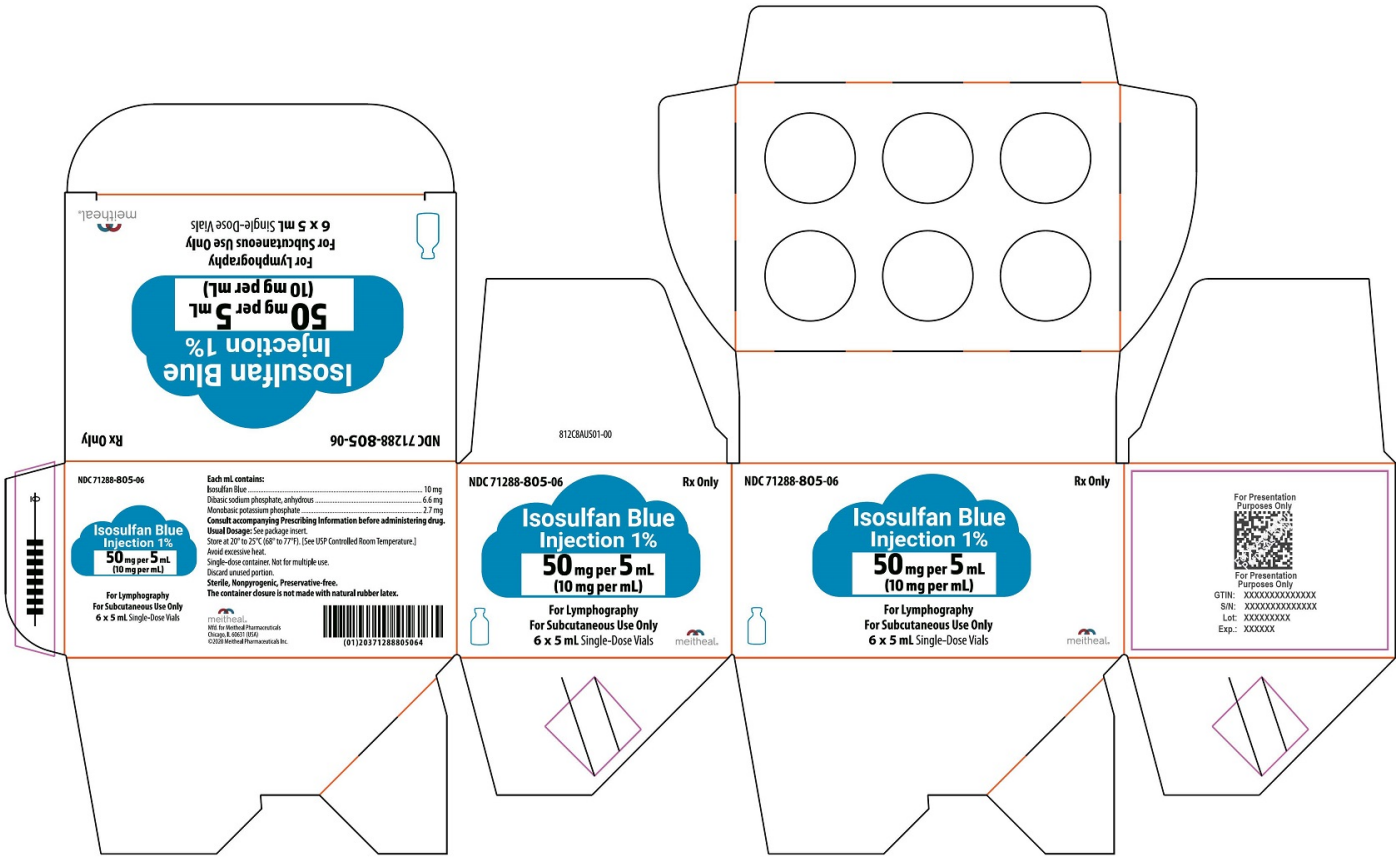
50 mg per 5 mL

(10 mg per mL)

For Lymphography

For Subcutaneous Use Only

6 x 5 mL Single-Dose Vials



ISOSULFAN BLUE

isosulfan blue injection, solution

Product Information			
Product Type	HUMAN PRESCRIPTION DRUG	**Item Code (Source)**	NDC:71288-805
Route of Administration	SUBCUTANEOUS		

Active Ingredient/Active Moiety		
Ingredient Name	**Basis of Strength**	**Strength**
isosulfan blue (UNII: 39N9K8S2A4) (isosulfan blue inner salt - UNII:NS6Q291771)	isosulfan blue	10 mg in 1 mL

Inactive Ingredients	
Ingredient Name	**Strength**
sodium phosphate, dibasic, anhydrous (UNII: 22ADO53M6F)	
potassium phosphate, monobasic (UNII: 4J9FJ0HL51)	
water (UNII: 059QF0KO0R)	

Packaging			
#	Item Code	Package Description	Marketing Start	Marketing End

#	Item Code	Package Description	Date	Date
1	NDC:71288-805-06	6 in 1 CARTON	11/03/2021	
1	NDC:71288-805-05	5 mL in 1 VIAL, SINGLE-DOSE; Type 0: Not a Combination Product		

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANDA	ANDA213130	11/03/2021	

Labeler - Meitheal Pharmaceuticals Inc. (080548348)

Establishment

Name	Address	ID/FEI	Business Operations
Nanjing King-Friend Biochemical Pharmaceutical Co., Ltd.		421297554	MANUFACTURE(71288-805)

Revised: 10/2021 Meitheal Pharmaceuticals Inc.