

November 1, 2017

Dear Valued B. Braun Customer,

Since our August 22<sup>nd</sup> communication, B. Braun Medical Inc. has continued to experience an increase in demand for IV solutions coupled with unanticipated production interruptions that have contributed to decreases in supply and delays in the release of commercially available product. We remain committed to our investments in new production facilities, equipment upgrades and process improvements, however, these unplanned production interruptions have led to increased quarantine levels and limited supply of product.

Minimizing production interruptions and reducing quarantine levels remains a top priority. We are prioritizing production forecasts based on our inventory and the inventory within our distributors. Improvements are expected in the coming weeks and months, but we acknowledge that our supply will not meet your comprehensive needs over the short term.

We advise you to continue sourcing a portion of your product demand from alternative manufacturers for **all PAB® (SVP) and the following four Excel® codes (L7500, L8000, L8001 and L8002)** through the first quarter of 2018. Allocations were previously adjusted as needed.

As a result of current supply availability constraints with our LVP and SVP products, **it is now anticipated that all Excel® and PAB codes will experience inconsistent supply** through first quarter of 2018. Please reference the list of affected products on the following page.

Patient care ultimately remains the highest priority for us. We sincerely apologize that B. Braun's supply inconsistencies have created disruptions to your organization. We will continue to communicate on a regular basis to provide you with timely and transparent information. We appreciate your continued support during this difficult time.

B. Braun continues to communicate with the FDA regarding our supply constraints and potential opportunities for the temporary importation of foreign products to help alleviate the situation. Information regarding drug products that are experiencing supply disruptions in the US is communicated by manufacturers to the FDA and posted on the FDA web page. For specific information regarding drug supply issues, please refer to the following link: <https://www.fda.gov/Drugs/DrugSafety/DrugShortages>.

Sincerely,



Tom Sutton  
Vice President, Marketing

B. Braun Medical Inc. advises sourcing a portion of your demand of the following products from alternative manufacturers through the first quarter of 2018.

Product Code	NDC #	B. Braun Product	Size (mL)	Container
L7500	0264-7750-00	Lactated Ringer's Injection USP	1000	Excel
L8000	0264-7800-00	0.9% Sodium Chloride Injection USP	1000	Excel
L8001	0264-7800-10	0.9% Sodium Chloride Injection USP	500	Excel
L8002	0264-7800-20	0.9% Sodium Chloride Injection USP	250	Excel
D5353-5224	0264-5535-32	Metronidazole Injection USP 500 mg (5 mg/mL)	100	PAB
S5104-5264	0264-1510-32	5% Dextrose Injection USP	100 fill in 150	PAB
S5104-5384	0264-1510-31	5% Dextrose Injection USP	50 fill in 100	PAB
S5104-5410*	0264-1510-36	5% Dextrose Injection USP	25 fill in 100	PAB
S8004-5264	0264-1800-32	0.9% Sodium Chloride Injection USP	100 fill in 150	PAB
S8004-5384	0264-1800-31	0.9% Sodium Chloride Injection USP	50 fill in 100	PAB
S8004-5410	0264-1800-36	0.9% Sodium Chloride Injection USP	25 fill in 100	PAB
5904-52	-	Empty PAB	150 mL	PAB

\*Currently not available.

B. Braun Medical Inc. anticipates the following codes will experience intermittent supply through the first quarter of 2018.

Product Code	NDC #	B. Braun Product	Size (mL)	Container
L5101	0264-7510-10	5% Dextrose Injection USP	500	Excel
L5102	0264-7510-20	5% Dextrose Injection USP	250	Excel
L5200	0264-7520-00	10% Dextrose Injection USP	1000	Excel
L5201	0264-7520-10	10% Dextrose Injection USP	500	Excel
L5202	0264-7520-20	10% Dextrose Injection USP	250	Excel
L6050	0264-7605-00	2.5% Dextrose and 0.45% Sodium Chloride Injection USP	1000	Excel
L6051	0264-7605-10	2.5% Dextrose and 0.45% Sodium Chloride Injection USP	500	Excel
L6100	0264-7610-00	5% Dextrose and 0.9% Sodium Chloride Injection USP	1000	Excel
L6101	0264-7610-10	5% Dextrose and 0.9% Sodium Chloride Injection USP	500	Excel
L6102	0264-7610-20	5% Dextrose and 0.9% Sodium Chloride Injection USP	250	Excel
L6120	0264-7612-00	5% Dextrose and 0.45% Sodium Chloride Injection USP	1000	Excel
L6121	0264-7612-10	5% Dextrose and 0.45% Sodium Chloride Injection USP	500	Excel
L6122	0264-7612-20	5% Dextrose and 0.45% Sodium Chloride Injection USP	250	Excel
L6140	0264-7614-00	5% Dextrose and 0.33% Sodium Chloride Injection USP	1000	Excel
L6141	0264-7614-10	5% Dextrose and 0.33% Sodium Chloride Injection USP	500	Excel
L6160	0264-7616-00	5% Dextrose and 0.20% Sodium Chloride Injection USP	1000	Excel
L6161	0264-7616-10	5% Dextrose and 0.20% Sodium Chloride Injection USP	500	Excel
L6162	0264-7616-20	5% Dextrose and 0.20% Sodium Chloride Injection USP	250	Excel

L6220	0264-7622-00	10% Dextrose and 0.45% Sodium Chloride Injection USP	1000	Excel
L6232	0264-7623-20	10% Dextrose and 0.45% Sodium Chloride Injection USP	250	Excel
L7800	0264-7780-00	Ringer's Injection USP	1000	Excel
L7810	0264-7810-00	5% Dextrose in Ringer's Injections	1000	Excel
L7500	0264-7750-00	Lactated Ringer's Injection USP	1000	Excel
L7501	0264-7750-10	Lactated Ringer's Injection USP	500	Excel
L7502	0264-7750-20	Lactated Ringer's Injection USP	250	Excel
L7510	0264-7751-00	5% Dextrose in Lactated Ringer's Injection	1000	Excel
L7511	0264-7751-50	5% Dextrose in Lactated Ringer's Injection	500	Excel
L8020	0264-7802-00	0.45% Sodium Chloride Injection USP	1000	Excel
L8021	0264-7802-10	0.45% Sodium Chloride Injection USP	500	Excel
L8051	0264-7805-10	3% Sodium Chloride Injection USP (Hypertonic)	500	Excel
L8061	0264-7806-10	5% Sodium Chloride Injection USP (Hypertonic)	500	Excel
L6250	0264-7625-00	0.15% Potassium Chloride in 5% Dextrose Injection USP (20 mEq K+/liter)	1000	Excel
L6280	0264-7628-00	0.30% Potassium Chloride in 5% Dextrose Injection USP (40 mEq K+/liter)	1000	Excel
L8500	0264-7850-00	Sterile Water for Injection	1000	Excel
L8501-01	0264-7850-10	Sterile Water for Injection	500	Excel
L8502	0264-7850-20	Sterile Water for Injection	250	Excel
L6340	0264-7634-00	0.075% Potassium Chloride in 5% Dextrose and 0.45% Sodium Chloride Injection USP (10 mEq K+/liter)	1000	Excel

L6350	0264-7635-00	0.15% Potassium Chloride in 5% Dextrose and 0.45% Sodium Chloride Injection USP (20 mEq K+/liter)	1000	Excel
L6360	0264-7636-00	0.22% Potassium Chloride in 5% Dextrose and 0.45% Sodium Chloride Injection USP (30 mEq K+/liter)	1000	Excel
L6380	0264-7638-00	0.30% Potassium Chloride in 5% Dextrose and 0.45% Sodium Chloride Injection USP (40 mEq K+/liter)	1000	Excel
L6550	0264-7655-00	0.15% Potassium Chloride in 5% Dextrose and 0.33% Sodium Chloride Injection USP (20 mEq K+/liter)	1000	Excel
L6450	0264-7645-00	0.15% Potassium Chloride in 5% Dextrose and 0.20% Sodium Chloride Injection USP (20 mEq K+/liter)	1000	Excel
L6452	0264-7645-20	0.15% Potassium Chloride in 5% Dextrose and 0.20% Sodium Chloride Injection USP (20 mEq K+/liter)	250	Excel
L6520	0264-7652-00	0.15% Potassium Chloride in 5% Dextrose and 0.9% Sodium Chloride Injection USP (20 mEq K+/liter)	1000	Excel
L8650	0264-7865-00	0.15% Potassium Chloride in 0.9% Sodium Chloride Injection USP (40 mEq K+/liter)	1000	Excel
L7190	0264-7719-00	Isolyte® H (Multi-Electrolyte Injection) in 5% Dextrose	1000	Excel
L7200	0264-7720-00	Isolyte® M (Multi-Electrolyte Injection) in 5% Dextrose	1000	Excel
L7301	0264-7730-10	Isolyte® P (Multi-Electrolyte Injection) in 5% Dextrose	500	Excel
L7030	0264-7703-00	Isolyte® S (Multi-Electrolyte Injection) in 5% Dextrose	1000	Excel
L7070	0264-7707-00	Isolyte® S pH 7.4 (Multi-Electrolyte Injection)	1000	Excel

L7071	0264-7707-10	Isolyte® S pH 7.4(Multi-Electrolyte Injection)	500	Excel
L5781	0264-7578-10	20% Mannitol Injection USP	500	Excel
L5782	0264-7578-20	20% Mannitol Injection USP	250	Excel
L6511	0264-1965-10	HESPAN® (6% hetastarch in 0.9% sodium chloride injection)	500	Excel
P5671	0264-9567-10	20,000 Units Heparin in 5% Dextrose Injection, 40 Units/mL	500	Excel
P5771	0264-9577-10	25,000 Units Heparin in 5% Dextrose Injection, 50 Units/mL	500	Excel
P5872	0264-9587-20	25,000 Units Heparin in 5% Dextrose Injection, 100 Units/mL	250	Excel
P8721	0264-9872-10	1000 Units Heparin in 0.9% Sodium Chloride Injection, 2 Units/mL	500	Excel
P5982	0264-9598-20	8 mg/mL: 0.8% Lidocaine Hydrochloride and 5% Dextrose Injection USP (2 g)	250	Excel
P5941	0264-9594-10	4 mg/mL: 0.4% Lidocaine Hydrochloride and 5% Dextrose Injection USP (2 g)	500	Excel
P5942	0264-9594-20	4 mg/mL: 0.4% Lidocaine Hydrochloride and 5% Dextrose Injection USP (1 g)	250	Excel
P5541	0264-9554-10	400 mg: 0.08% Theophylline in 5% Dextrose Injection (0.8 mg/mL)	500	Excel