

**Supplementary material for:** Goertz C.E.C., Woodie K., Long B., Hartman L., Gaglione E., Christen D., Clauss T., Flower J., Tuttle A., Richard C., Romano T., Schmitt T., Otjen E., Osborn S., Aibel S., Binder T., Van Bonn W., Castellote M., Mooney T.A., Dennison-Gibby S., Burek-Huntington K. & Rowles T.K. 2021. Stranded beluga (*Delphinapterus leucas*) calf response and care: reports of two cases with different outcomes. *Polar Research* 40. Correspondence: Caroline E.C. Goertz, Alaska SeaLife Center, PO Box 1329, Seward, AK 99664, USA. E-mail: carrieg@alaskasealife.org

**Supplementary Table S1.** Beluga calf (*Delphinapterus leucas*) formula components and caloric value for approximately 1.5 L of formula. Proximate analysis (500 g herring, no oil) 1.60 kcal/ml based on formula developed for hand-rearing neonatal beluga calves at zoological institutions when maternal care was insufficient (Winhall 2012). Most supplements available from Amazon. Zoologic Milk Matrix available from Pet Ag, 201 Keyes Ave., Hampshire, IL 60140, USA.

Ingredient	Amount	Caloric value
Ground herring bodies (no head, fins, tail)	500 g (0-725g)	2 kcal/g
Zoologic 33/40 (vegetable fat)	150 g	4.92 kcal/g
Zoologic 30/52 (animal fat)	80 g	5.88 kcal/g
Dextrose powder	0 (0-7.5 g)	3.4 kcal/g
Lecithin	3.5 g	
Dicalcium phosphate	1.3 g	
Taurine	125 g	
NaCl	4.5 g	
Mazuri Vita Zu Marine Mammal 5B41	½ tablet	
Salmon oil	20 ml (0-125 ml)	8.5 kcal/ml
Water	700 ml (625-700 ml)	

**Supplementary Table S2:** Therapeutic agents and treatments utilized for stranded beluga calves (*Delphinapterus leucas*) DL1202 and DL1705. Dosing was based on published values (Stoskopf et al. 2001), upon the recommendation of consulting veterinarians, or based on published cases (Reidarson et al. 2001; Sweeney et al. 2010; Osborn et al. 2012; Winhall 2012; Flower et al. 2018).

Drug	Dosage (mg/kg)	Route	Freq./time
<b>Antimicrobials</b>			
Clavamox	7-22 mg/kg	PO <sup>c</sup>	BID <sup>h</sup>
Enrofloxacin	2.5-4 mg/kg	PO	BID
Convenia <sup>a</sup>	8 mg/kg	SQ <sup>d</sup>	q17d <sup>i</sup>
Amikacin 250 mg <sup>a</sup>	7-11 mg/kg	IM <sup>e</sup>	BID-SID <sup>j</sup>
Levofloxacin <sup>a</sup>	5 mg/kg	PO	SID
Nystatin 100 000 IU/mL <sup>a</sup>	500 000 IU/ 75kg	PO	TID <sup>k</sup>
<b>Gastrointestinal support</b>			
Ranitidine	1-2mg/kg	PO	BID
Sucralfate	1g/animal	PO	BID-TID
Lactobacillus probiotic	10 billion CFUs/animal	PO	TID-BID
Lactase enzyme	9000 units/animal	PO	each feed
Simethicone (20 mg/0.3 mls)	2-3 mls	PO	each feed
Lactulose (10 g/15 mls)	2-10 mls	PO	each feed
Enema (water +/- lube)	50-500 mls	PR <sup>f</sup>	PRN <sup>l</sup> -6x/D for constipation
Denamarin+ (425 mg SAME with 35 mg Silybin)	15-20 mg SAME/kg	PO	BID
<b>Miscellaneous</b>			
Poly Vi Sol w iron 10mg/mL <sup>a</sup>	100-110 mg/calf/day	PO	BID
Preparation H <sup>a</sup>		TOP <sup>g</sup>	post-blood
A&D cream or SSD cream <sup>a</sup>	Thin layer to cover lesions	TOP	PRN
NaCl Fluids <sup>b</sup>	500-1000 mls	SQ	PRN
Aspirin <sup>b</sup>	3 mg/kg	PO	SID
Diazepam <sup>b</sup>	0.5 mg/kg	IM or PO	PRN for cramping

<sup>a</sup> Only DL1702. <sup>b</sup> Only DL1205. <sup>c</sup> Per os, by mouth. <sup>d</sup> Subcutaneous. <sup>e</sup> Intramuscular. <sup>f</sup> Per rectum. <sup>g</sup> Topically. <sup>h</sup> Twice a day. <sup>i</sup> Every 17 days. <sup>j</sup> Once a day. <sup>k</sup> Three times a day. <sup>l</sup> As needed.