Gammagard Liquid 10%®

For complete product information please refer to product monograph.

Rate mL/kg/hr	Patient Weight in Kilograms																			
	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	55	60	65	70
	Infusion Rate mL/hr																			
0.5	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	27.5	30	32.5	35
1.0	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	55	60	65	70
2.0	40	44	48	52	56	60	64	68	72	76	80	84	88	92	96	100	110	120	130	140
*4.0	80	88	96	104	112	120	128	136	144	152	160	168	176	184	192	200	220	240	260	280
MMN only **5.4	108	118	129	140	151	162	172	183	194	205	216	226	237	248	259	270	297	324	351	378
6.0	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	330	360	390	420
8.0	160	176	192	208	224	240	256	272	288	304	320	336	352	368	384	400	440	480	520	560

*Check with prescriber to ensure the rate may be increased above 4.0 mL/kg/hr for each specific patient as those at risk of renal failure or thrombosis may require lower dosages and/or infusion rates. Recommended maximum infusion rate for first infusion.

**Maximum infusion rate for treatment of Multifocal Motor Neuropathy (MMN) is 5.4 mL/kg/hr .

If weight falls between two increments, round down and use rates specified for that weight or calculate hourly infusion rates by using the following formula: Rate (mL/kg/hr) x Weight (kg) = Hourly infusion rate (mLs/hr). Perform a **DOUBLE CHECK** of all calculations.

Perform assessment including vital signs at a ***minimum***: pre-infusion, 15 minutes after infusion initiated, with each rate increase, upon completion, and then 30-60 minutes post infusion (minimum observation period of 20 minutes post completion of administration). RHA/site/unit policy may dictate more frequent monitoring during administration of IVIG.

For **first infusion or if greater than 8 weeks** since last treatment, it is recommended to initiate infusion at 0.5 mL/kg/hr for 30 minutes. Gradually increase rate every 15-30 minutes, **as tolerated**, according to steps in table. It is **not** recommended to advance to the maximum rate with the **first infusion**.

If tolerated well, for **subsequent infusions** follow the same process beginning at 0.5 mL/kg/hr rate and increase every 15-30 minutes as tolerated. For recipients who have received IVIG previously for **at least 3 doses, without incident**, the prescriber may order a personalized rate and/or protocol for future infusions.

Recipients who are overweight, immobilized, have a history of hypertension, cardiovascular disease, previous thrombotic events, and/or dehydration are at high risk for thromboembolic events. ***Recipients with acute renal failure should be administered IVIG products at the minimum concentration and the minimum rate of infusion practical.***

Many of the adverse effects associated with IVIG are rate related so simply reducing the infusion rate may minimize or eliminate these adverse effects. If adverse effects persist, a change in product from one manufacturer of IVIG to another may also increase tolerability. Administration of pre-medications may also minimize adverse effects. Ensure the recipient is adequately hydrated prior to initiation as dehydration can predispose to headaches, thromboembolic events and other adverse reactions.

Provincial Blood Coordinating Program

Standardized Pediatric (20-70 kg) IVIG Infusion Rate Tables

Newfoundland Labrador

Gamunex®, IGIVnex®, and Octagam®
(All 10% IVIG solutions)

For complete product information please refer to product monograph.

Rate mL/kg/min	Patient Weight in Kilograms																			
	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	55	60	65	70
	Infusion Rate mL/hr																			
0.01	12	13.2	14.4	15.6	16.8	18	19.2	20.4	21.6	22.8	24	25.2	26.4	27.6	28.8	30	33	36	39	42
0.02	24	26.4	28.8	31.2	33.6	36	38.4	40.8	43.2	45.6	48	50.4	52.8	55.2	57.6	60	66	72	78	84
0.04	48	52.8	57.6	62.4	67.2	72	76.8	81.6	86.4	91.2	96	101	105	110	115	120	132	144	156	168
0.06	72	79.2	86.4	93.6	100	108	115	122	129	136	144	151	158	165	172	180	198	216	234	252
*0.08	96	105	115	124	134	144	153	163	172	182	192	201	211	220	230	240	264	288	312	336
0.10	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	330	360	390	420
** 0.12	144	158	172	187	201	216	230	244	259	273	288	302	316	331	345	360	396	432	468	504
0.14	168	184	201	218	235	252	268	285	302	319	336	352	369	386	403	420	462	504	546	588

*Check with prescriber to ensure the rate may be increased above 0.08 mL/kg/min for each specific patient as those at risk of renal failure or thrombosis may require lower dosages and/or infusion rates. Recommended maximum infusion rate for first infusion.

**Maximum infusion rate for Octagam® 10%

If weight falls between two increments, round down and use rates specified for that weight or calculate hourly infusion rates by using the following formula: Rate (mL/kg/min) x Weight (kg) x 60 min/hr = Hourly infusion rate (mLs/hr). Perform a **DOUBLE CHECK** of all calculations.

Perform assessment including vital signs at a **minimum**: pre-infusion, 15 minutes after infusion initiated, with each rate increase, upon completion, and then 30-60 minutes post infusion. RHA/site/unit policy may dictate more frequent monitoring during administration of IVIG.

For **first infusion or if greater than 8 weeks** since last treatment, it is recommended to initiate infusion at 0.01 mL/kg/min for 30 minutes. Gradually increase rate every 15-30 minutes, **as tolerated,** according to steps in table. It is **not** recommended to advance to the maximum rate with the **first infusion**.

If tolerated well, for **subsequent infusions** follow the same process but begin at 0.02 mL/kg/min rate and increase every 15-30 minutes as tolerated. For recipients who have received IVIG previously for **at least 3 doses, without incident,** the prescriber may order a personalized rate and/or protocol for future infusions.

Recipients who are overweight, immobilized, have a history of hypertension, cardiovascular disease, previous thrombotic events, and/or dehydration are at high risk for thromboembolic events. ***Recipients with acute renal failure should be administered IVIG products at the minimum concentration and the minimum rate of infusion practical.***

Many of the adverse effects associated with IVIG are rate related so simply reducing the infusion rate may minimize or eliminate these adverse effects. If adverse effects persist, a change in product from one manufacturer of IVIG to another may also increase tolerability. Administration of pre-medications may also minimize adverse effects. Ensure the recipient is adequately hydrated prior to initiation as dehydration can predispose to headaches, thromboembolic events and other adverse reactions.

Panzyga 10%®

For complete product information please refer to product monograph.

Rate mL/kg/min	Patient Weight in Kilograms																			
	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	55	60	65	70
	Infusion Rate mL/hr																			
0.01	12	13.2	14.4	15.6	16.8	18	19.2	20.4	21.6	22.8	24	25.2	26.4	27.6	28.8	30	33	36	39	42
0.02	24	26.4	28.8	31.2	33.6	36	38.4	40.8	43.2	45.6	48	50.4	52.8	55.2	57.6	60	66	72	78	84
0.04	48	52.8	57.6	62.4	67.2	72	76.8	81.6	86.4	91.2	96	101	106	110	115	120	132	144	156	168
*0.08	96	106	115	125	134	144	154	163	173	182	192	202	211	221	230	240	264	288	312	336
**0.12	144	158	173	187	202	216	230	245	259	274	288	302	317	331	346	360	396	432	468	504
***0.14	168	185	202	218	235	252	269	286	302	319	336	353	370	386	403	420	462	504	546	588

*Check with prescriber to ensure the rate may be increased to 0.08 mL/kg/min for each specific patient as those at risk of renal failure or thrombosis may require lower dosages and/or infusion rates. Recommended maximum infusion rate for **all** infusions, exceptions to follow.

Primary Immune Deficiency and Secondary Immune Deficiency recipients who have tolerated Panzyga well for at least **three treatments previously may be increased to 0.12 mL/kg/min.

***Primary Immune Deficiency and Secondary Immune Deficiency recipients who have tolerated Panzyga well for at least **six** treatments previously may be increased to 0.14 mL/kg/min.

Above rate progressions (up to 0.08 mL/kg/min) are recommended for **all** initial infusions. If initial infusion tolerated well in Primary Immune Deficiency and Secondary Immune Deficiency recipients, the recommended rate progression for subsequent infusions is 0.01, 0.04, 0.08 mL/kg/min and then 0.12 or 0.14 mL/kg/min if applicable.

If weight falls between two increments, round down and use rates specified for that weight or calculate hourly infusion rates by using the following formula: Rate (mL/kg/min) x Weight (kg) x 60 min/hr = Hourly infusion rate (mLs/hr). Perform a **DOUBLE CHECK** of all calculations.

Perform assessment including vital signs at a ***minimum***: pre-infusion, 15 minutes after infusion initiated, with each rate increase, upon completion, and then 30-60 minutes post infusion (minimum observation period of 20 minutes post completion of administration). RHA/site/unit policy may dictate more frequent monitoring during administration of IVIG.

For **first infusion or if greater than 8 weeks** since last treatment, it is recommended to initiate infusion at 0.01 mL/kg/min for 30 minutes. Gradually increase rate every 15-30 minutes, **as tolerated**, according to steps in table. It is **not** recommended to advance to the maximum rate with the **first infusion**.

If tolerated well, for **subsequent infusions for Primary Immune Deficiency and Secondary Immune Deficiency** recipients increase rate every 15-30 minutes as tolerated as per the following rate increments (0.01, 0.04, 0.08 mL/kg/min). Rates can be further increased to 0.12 mL/kg/min after three well tolerated treatments and to 0.14 mL/kg/min after six well tolerated treatments. Please refer to link for further instructions Octapharma Product Monograph.

Recipients who are overweight, immobilized, have a history of hypertension, cardiovascular disease, previous thrombotic events, and/or dehydration are at high risk for thromboembolic events. ***Recipients with acute renal failure should be administered IVIG products at the minimum concentration and the minimum rate of infusion practical.***

Many of the adverse effects associated with IVIG are rate related so simply reducing the infusion rate may minimize or eliminate these adverse effects. If adverse effects persist, a change in product from one manufacturer of IVIG to another may also increase tolerability. Administration of pre-medications may also minimize adverse effects. Ensure the recipient is adequately hydrated prior to initiation as dehydration can predispose to headaches, thromboembolic events and other adverse reactions.

Privigen 10%®

For complete product information please refer to product monograph.

Rate mL/kg/hr	Patient Weight in Kilograms																			
	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	55	60	65	70
	Infusion Rate mL/hr																			
0.3	6	6.6	7.2	7.8	8.4	9	9.6	10.2	10.8	11.4	12	12.6	13.2	13.8	14.4	15	16.5	18	19.5	21
0.6	12	13.2	14.4	15.6	16.8	18	19.2	20.4	21.6	22.8	24	25.2	26.4	27.6	28.8	30	33	36	39	42
1.2	24	26.4	28.8	31.2	33.6	36	38.4	40.8	43.2	45.6	48	50.4	52.8	55.2	57.6	60	66	72	78	84
2.4	48	52.8	57.6	62.4	67.2	72	76.8	81.6	86.4	91.2	96	101	105	110	115	120	132	144	156	168
3.6	72	79.2	86.4	93.6	100	108	115	122	129	136	144	151	158	165	172	180	198	216	234	252
*4.8	96	105	115	124	134	144	153	163	172	182	192	201	211	220	230	240	264	288	312	336
6.0	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	330	360	390	420
7.2	144	158	172	187	201	216	230	244	259	273	288	302	316	331	345	360	396	432	468	504

*Check with prescriber to ensure the rate may be increased above 4.8 mL/kg/hr for each specific patient as those at risk of renal failure or thrombosis may require lower dosages and/or infusion rates. Recommended maximum infusion rate for first infusion.

If weight falls between two increments, round down and use rates specified for that weight or calculate hourly infusion rates by using the following formula: Rate (mL/kg/hr) x Weight (kg) = Hourly infusion rate (mLs/hr). Perform a **DOUBLE CHECK** of all calculations.

Perform assessment including vital signs at a ***minimum***: pre-infusion, 15 minutes after infusion initiated, with each rate increase, upon completion, and then 30-60 minutes post infusion. RHA/site/unit policy may dictate more frequent monitoring during administration of IVIG.

For **first infusion or if greater than 8 weeks** since last treatment, it is recommended to initiate infusion at 0.3 mL/kg/hr for 30 minutes. Gradually increase rate every 15-30 minutes, **as tolerated**, according to steps in table. It is **not** recommended to advance to the maximum rate with the **first infusion**.

If tolerated well, for **subsequent infusions** follow the same process but begin at 0.6 mL/kg/hr rate and increase every 15-30 minutes as tolerated. In recipients who have received IVIG previously for **at least 3 doses**, **without incident**, the prescriber may order a personalized rate and/or protocol for future infusions. The product monograph suggests that *"initial infusion rate for patients who have previously received Privigen® for three or more consecutive infusions can be individualized based on the rate the patient previously tolerated."* http://labeling.cslbehring.ca/PM/CA/Privigen/EN/Privigen-Product-Monograph.pdf (p. 20).

Recipients who are overweight, immobilized, have a history of hypertension, cardiovascular disease, previous thrombotic events, and/or dehydration are at high risk for thromboembolic events. ***Recipients with acute renal failure should be administered IVIG products at the minimum concentration and the minimum rate of infusion practical.***

Many of the adverse effects associated with IVIG are rate related so simply reducing the infusion rate may minimize or eliminate these adverse effects. If adverse effects persist, a change in product from one manufacturer of IVIG to another may also increase tolerability. Administration of pre-medications may also minimize adverse effects. Ensure the recipient is adequately hydrated prior to initiation as dehydration can predispose to headaches, thromboembolic events and other adverse reactions.