Gammagard Liquid 10%®

For complete product information please refer to product monograph.

Rate mL/kg/hr	Patient Weight in Kilograms																		
	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130
	Infusion Rate mL/hr																		
0.5	20	22.5	25	27.5	30	32.5	35	37.5	40	42.5	45	47.5	50	52.5	55	57.5	60	62.5	65
1.0	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130
2.0	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260
*4.0	160	180	200	220	240	260	280	300	320	340	360	380	400	420	440	460	480	500	520
MMN only **5.4	216	243	270	297	324	351	378	405	432	459	486	513	540	567	594	621	648	675	702
6.0	240	270	300	330	360	390	420	450	480	510	540	570	600	630	660	690	720	750	780
8.0	320	360	400	440	480	520	560	600	640	680	720	760	800	840	880	920	960	1000	1040

*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.

Recommended **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 the **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 Adult (40-130 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																		
	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130
	Infusion Rate mL/hr																		
0.01	24	27	30	33	36	39	42	45	48	51	54	57	60	63	66	69	72	75	78
0.02	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156
0.04	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312
0.06	144	162	180	198	216	234	252	270	288	306	324	342	360	378	396	414	432	450	468
* 0.08	192	216	240	264	288	312	336	360	384	408	432	456	480	504	528	552	576	600	624
** 0.12	288	324	360	396	432	468	504	540	576	612	648	684	720	756	792	828	864	900	936
0.14	336	378	420	462	504	546	588	630	672	714	756	798	840	882	924	966	1008	1050	1092

*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.

Provincial Blood Coordinating Program

Standardized Adult (40-130 kg) IVIG Infusion Rate Tables

Newfoundland Labrador

Panzyga 10%®

For complete product information please refer to product monograph.

Rate mL/kg/min	Patient Weight in Kilograms																		
	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130
	Infusion Rate mL/hr																		
0.01	24	27	30	33	36	39	42	45	48	51	54	57	60	63	66	69	72	75	78
0.02	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156
0.04	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312
*0.08	192	216	240	264	288	312	336	360	384	408	432	456	480	504	528	552	576	600	624
** 0.12	288	324	360	396	432	468	504	540	576	612	648	684	720	756	792	828	864	900	936
***0.14	336	378	420	462	504	546	588	630	672	714	756	798	840	882	924	966	1008	1050	1092

*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 then 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																		
	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130
	Infusion Rate mL/hr																		
0.3	12	13.5	15	16.5	18	19.5	21	22.5	24	25.5	27	28.5	30	31.5	33	34.5	36	37.5	39
0.6	24	27	30	33	36	39	42	45	48	51	54	57	60	63	66	69	72	75	78
1.2	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	156
2.4	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312
3.6	144	162	180	198	216	234	252	270	288	306	324	342	360	378	396	414	432	450	468
* 4.8	192	216	240	264	288	312	336	360	384	408	432	456	480	504	528	552	576	600	624
6.0	240	270	300	330	360	390	420	450	480	510	540	570	600	630	660	690	720	750	780
7.2	288	324	360	396	432	468	504	540	576	612	648	684	720	756	792	828	864	900	936

*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.