

Laboratory **National Institute of Biologicals, Ministry of Health & Family Welfare,  
Government of India, A-32, Sector 62, Noida, Uttar Pradesh**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-7725**

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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**BIOLOGICAL TESTING**

I.	<b>BIOLOGICALS DERIVED PHARMACEUTICALS</b>			
A.	<b>Recombinant Proteins</b>			
1.	<b>rh-Erythropoietin</b>	Identification (In vivo Bioassay)	NIB/RPL/SOP/32/R0;dt. 07.06.17 Reference: IP 2014 Pg No. 3355-3359	Qualitative
2.	<b>Filgrastim</b>	Identification (Bioassay)	NIB/RPL/SOP/60/R3;dt. 05.03.18 Reference: IP 2014 Pg No. 3363-3365	Qualitative
3.	<b>Interferon Beta-1a</b>	Identification (CPEP Assay)	NIB/RPL/SOP/78/R1;dt. 24.05.18 Reference: IP 2014 Pg No. 3373-3378	Qualitative
4.	<b>Interferon Alpha-2b</b>	Identification (CPEP Assay)	NIB/RPL/SOP/78/R1;dt. 24.05.18 Reference: IP 2014 Pg No. 3371-3373	Qualitative
5.	<b>Peg-Filgrastim</b>	Identification (Bioassay)	NIB/RPL/SOP/92/R1;dt. 25.01.17 Reference:Manufacturer Protocol	Qualitative
6.	<b>Peg-Interferon Alpha 2b</b>	Identification (CPEP Assay)	NIB/RPL/SOP/73/R1;dt. 05.04.17 Reference:Manufacturer Protocol	Qualitative
7.	<b>Peg Interferon Beta-1a</b>	Identification (CPEP Assay)	NIB/RPL/SOP/78/R1;dt. 24.05.18 Reference: Reference:Manufacturer Protocol	Qualitative
8.	<b>rh-Erythropoietin</b>	Assay/Potency (In vitro Bioassay)	NIB/RPL/SOP/55/R3;dt. 21.10.16 Reference: IP 2014 Pg No. 3352-3359	80-125% of stated potency

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9.	rh-Erythropoietin	Assay/Potency (In vivo Bioassay)	NIB/RPL/SOP/32/R0;dt. 07.06.17 Reference: IP 2014 Pg No. 3352-3359	80-125% of stated potency
10.	Filgrastim	Assay/Potency (Proliferation Bioassay)	NIB/RPL/SOP/60/R3;dt:05.03.18 Reference: IP 2014 Pg No. 3363-3365	NLT 80 and NMT 125% of the stated potency
11.	Interferon Beta-1a	Assay/Potency (CPEP Assay)	NIB/RPL/SOP/78/R1;dt. 24.05.18 Reference: IP 2014 Pg No. 3373-3378	80-130% of stated potency
12.	Interferon Alpha-2b	Assay/Potency (CPEP Assay)	NIB/RPL/SOP/78/R1;dt. 24.05.18 Reference: IP 2014 Pg No. 3371-3373	80-125% of stated potency
13.	Peg-Filgrastim	Assay/Potency (Bioassay)	NIB/RPL/SOP/92/R1;dt. 25.01.17 Reference: Manufacturer Protocol	80-125% of stated potency
14.	Peg-Interferon Alpha 2b	Assay/Potency (CPEP Assay)	NIB/RPL/SOP/73/R1;dt. 05.04.17 Reference: Manufacturer Protocol	50-150% of stated potency
15.	Teriparatide (rh-PTH)	Assay/Potency (Bioassay)	NIB/RPL/SOP/104/R0;dt. 08.06.17 Reference: Manufacturer Protocol	60-160% Of Estimated potency
16.	Peg Interferon Beta-1a	Assay/Potency (CPEP Assay)	NIB/RPL/SOP/78/R1;dt. 24.05.18, Reference:Manufacturer Protocol	12-40 IU/ml
17.	Soluble Insulin, Isophane Insulin 1. Biphasic Isophane Insulin (25/75) 2. Biphasic Isophane Insulin (30/70) 3. Biphasic Isophane Insulin	Bacterial Endotoxin (Gel Clot Method)	NIB/RPL/SOP/05/R3;dt. 26.04.18 Reference: IP 2014 (Appendix 2.2.3) 1963-1964, 1967-1968, 1977-1979, 3355-3359, 3363-3365, 3371-3373, 3373-3378, 3354	Qualitative

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	(50/50) 4. rh-Insulin Bulk 5. Insulin Glargine 6. Insulin Glulisine 7. Insulin Aspart 8. Insulin Aspart & Insulin Aspart Protamine Suspension (30/70) 9. Insulin Aspart & Insulin Aspart Protamine Suspension (50/50) 10. Exenatide 11. rh-Erythropoietin 12. Filgrastim 13. Interferon Beta-1a 14. Interferon Alpha-2b 15. Peg-Filgrastim 16. Peg-Interferon Alpha-2b 17. Peg Interferon Beta-1a			

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18.	1. Soluble Insulin 2. Isophane Insulin 3. Biphasic Isophane Insulin (25/75) 4. Biphasic Isophane Insulin (30/70) 5. Biphasic Isophane Insulin (50/50) 6. Insulin Glargine 7. Insulin Glulisine 8. Insulin Lispro 9. Insulin Lispro & Insulin Lispro Protamine Suspension (25/75) 10. Insulin Lispro & Insulin Lispro Protamine Suspension (50/50) 11. Insulin Aspart 12. Insulin Aspart & Insulin Aspart Protamine Suspension	Sterility (Membrane Filtration)	NIB/STR/SOP/001/R4;dt. 26.02.18 NIB/RPL/SOP/07/R2;dt. 06.03.18 Reference: IP 2014 (Appendix 2.2.11)	Qualitative (Complies/not complies)

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	(30/70) 13. Insulin Aspart & Insulin Aspart Protamine Suspension (50/50) Insulin Glargine 14. Insulin Detemir 15. Insulin Degludec 16. Insulin Degludec/ Insulin Aspart 17. Exenatide 18 Exenatide Once Weekly 18. Liraglutide 19. rh-Erythropoietin 20. Filgrastim 21. Interferon Beta-1a 22. Interferon Alpha-2b 23. Peg-Filgrastim 24. Peg-Interferon Alpha 2b 25. Teriparatide (rh-PTH) 26. Peg Interferon Beta-1a			

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<b>B. Vaccines (Bacterial Vaccine)</b>				
1.	<b>Haemophilus influenzae type b TT conjugate vaccine Bacillus Calmette Guerin (BCG) vaccine</b>	Sterility (Membrane filtration)	NIB/STR/SOP/001/R4;dt. 26.02.18 NIB/BVL/SOP/06/R1;dt 09.10.17 NIB/BVL/SOP/18/R4;dt.31. 07.17 Reference:IP 2014 Pg No:59-66,	Qualitative
2.	<b>Bacillus Calmette Guerin (BCG) vaccine</b>	Test for Excessive dermal reactivity	NIB/BVL/SOP/17/R4;dt. 31.07.17 Reference IP 2014;Pg No. 3059	Qualitative
		Test for Virulent mycobacteria	NIB/BVL/SOP/16/R4;dt. 31.07.17 Reference IP 2014;Pg No. 3059	Qualitative
4.	<b>Haemophilus influenzae type b TT conjugate vaccine</b>	Test for Pyrogen (in-vivo)	NIB/AF/SOP/002/R4;dt 19.07.17 NIB/BVL/SOP/06/R1;dt 09.10.17 Reference:IP 2014;Pg No. 36-37	Qualitative Complies/Not complies
		Test for Abnormal toxicity	NIB/AF/SOP/001/R3;dt 05.10.17 NIB/BVL/SOP/06/R1;dt 09.10.17 References:IP 2014;Pg No. 27	Qualitative Complies/Not complies
5.	<b>Bacillus Calmette Guerin (BCG) vaccine</b>	Test for Assay/Colony Forming Units (CFU)	NIB/BVL/SOP/15/R4;dt. 31.07.17 Reference IP 2014;Pg No.34-35 & 3059	1-33 x 10 <sup>6</sup> cfu/ml

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		Test for Temperature Stability	NIB/BVL/SOP/19/R4;dt. 31.07.17 Reference IP 2014;Pg No. 3059	NLT 20% of unheated vaccine
6.	1. Cell Culture Rabies Vaccine 2. Live attenuated Measles Vaccine 3. Live attenuated Rubella Vaccine 4. Live attenuated MMR Vaccine 5. Live Attenuated Measles & Rubella Vaccine 6. Inactivated Polio vaccine 7. Rotavirus Vaccine Rotarix 8. Hepatitis A Inactivated Vaccine 9. Hepatitis B 10. (r-DNA) Vaccine	Sterility (Membrane filtration)	NIB/STR/SOP/001/R4;dt. 26.02.18 Reference:IP 2014 Pg No:52-59	Qualitative (Complies/does not complies)
7.	1. Cell Culture Rabies Vaccine 2. Inactivated	Bacterial Endotoxin Test (Method A-Gel Clot method)	NIB/EHL/SOP/28/R3;dt.06.07.17 Reference:IP 2014, Pg. no. 28	Qualitative (Complies/does not complies)

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	<b>Polio vaccine</b> <b>3. Hepatitis A</b> <b>Inactivated Vaccine</b>			
<b>8.</b>	<b>Cell Culture</b> <b>Rabies Vaccine</b>	Virus inactivation test	NIB/VVL/SOP/008/R3dt 16.05.17 Reference:IP 2014,Pg. no 3135	Qualitative (Complies/does not complies)
		NIH Potency	NIB/VVL/SOP/007/R3dt. 01.5.18 Reference:IP 2014, Pg. no 3136 NIB/VVL/SOP/054/R0 dt. 07.07.17 Reference:BP 2017, Pg. no IV-662	Quantitative (NLT 2.5 IU/SHD) (Dilution 1:5 to 1:3125)
<b>9.</b>	<b>Live attenuated</b> <b>MMR Vaccine</b>	Identification & Potency-in vitro cell culture method using VERO & RK13 as indicator Cell Line	NIB/VVL/SOP/063/R0;dt.3 1.01.18 Reference:IP 2014, Pg no.3106	Mumps-NLT 5x10 <sup>3</sup> CCID <sub>50</sub> /single human dose;Measles- NLT 1x10 <sup>3</sup> CCID <sub>50</sub> /single human dose; Rubella-NLT 1x10 <sup>3</sup> CCID <sub>50</sub> /single human dose (Log <sub>10</sub> <sup>1-10<sup>5.5</sup></sup> )
<b>10.</b>	<b>Live attenuated</b> <b>Measles Vaccine</b>	Identification &Potency-in vitro cell culture method using VERO as indicator cell line	NIB/VVL/SOP/062/R0;dt 31.01.18 Reference:IP 2014, Pg no. 3105	NLT 1x10 <sup>3</sup> CCID <sub>50</sub>  (Log <sub>10</sub> <sup>1-10<sup>5.5</sup></sup> )
<b>11.</b>	<b>Live attenuated</b> <b>Rubella Vaccine</b>	Identification &Potency-in vitro cell culture method using RK 13 as indicator Cell line	NIB/VVL/SOP/061/R0;dt 31.01.18 Reference:IP 2014, Pg no. 3141	NLT 1x10 <sup>3</sup> CCID <sub>50</sub>  (Log <sub>10</sub> <sup>1-10<sup>5.5</sup></sup> )
<b>12.</b>	<b>Live attenuated</b> <b>MMR Vaccine</b>	Thermal Stability using VERO & RK 13 as indicator Cell line	NIB/VVL/SOP/063/R0;dt. 31.01.18 Reference:IP 2014, Pg no.3106	NMT 1.0 log <sub>10</sub> lower than that of unheated vaccine (Log <sub>10</sub> <sup>1-10<sup>5.5</sup></sup> )
<b>13.</b>	<b>Live attenuated</b>	Thermal Stability using	NIB/VVL/SOP/062/R0;d	NMT 1.0 log <sub>10</sub> lower



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	<b>Measles Vaccine</b>	VERO as indicator Cell line	t31.01.18 Reference:IP 2014, Pg no. 3105	than that of unheated vaccine (Log <sub>10</sub> <sup>1-10<sup>5.5</sup></sup> )
14.	<b>Live attenuated Rubella Vaccine</b>	Thermal Stability using RK-13 as indicator Cell line	NIB/VVL/SOP/061/R0;dt. 31.01.18 Reference:IP 2014, Pg no. 3141	Not 1.0log <sub>10</sub> lower than that of unheated vaccine (Log <sub>10</sub> <sup>1-10<sup>5.5</sup></sup> )
15.	<b>Live attenuated Measles &amp; Rubella Vaccine</b>	Identification, Potency & Thermal stability-in vitro cell culture method using VERO & RK-13 as indicator cell line	NIB/VVL/SOP/050/R0;dt. 10.01.17 Reference:IP 2014, Pg no. 3103-3105	Potency-Measles-NLT 1x10 <sup>3</sup> CCID <sub>50</sub> /single human dose;Rubella-NLT 1x10 <sup>3</sup> CCID <sub>50</sub> /single human dose Stability-NMT 1.0 log <sub>10</sub> lower than that of unheated vaccine (Log <sub>10</sub> <sup>1-10<sup>5.5</sup></sup> )
16.	<b>Inactivated Polio vaccine</b>	Identification, potency invitro	NIB/VVL/SOP/053/R0 dt:02.08.17 Reference:IP 2014 Pg. no. 3126-3127	D-antigen content should be NLT Type I 40DU/0.5mL Type II 8DU/0.5mL Type III 32DU/0.5mL Type I:5.66-0.044219 Type II:1-0.0078125 Type III:3.49-0.027266
17.	<b>Inactivated Polio vaccine</b>	Potency assayin vivo	NIB/VVL/SOP/057/R0 dt:02.08.17 Reference:IP 2014 Pg. no. 3126-3127	Efficacy from PLA Lower limit ≥0.25 for each type
18.	<b>Rotavirus Vaccine Rotarix</b>	Identification, potency & Thermal stability using immunofluorescence method, using MA 104 as indicator cell line	NIB/VVL/SOP/048/R0 dt:06.01.17 Reference:EP 8.0 Pg. no. 899-900	Potency: NLT 6.0 log <sub>10</sub> CCID <sub>50</sub> Stability:Not 0.5 log <sub>10</sub> lower than that of unheated vaccine (Log <sub>10</sub> <sup>1-106<sup>6.4</sup></sup> )
19.	<b>Hepatitis A Inactivated Vaccine</b>	Identification and assay by ELISA	NIB/VVL/SOP/58/R0; dt:07.09.2017 Reference:BP-2017	NLT 500 IU/ml (250-15.625IU/ml)

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	Hepatitis B (r-DNA) Vaccine		NIB/VVL/SOP/59/R0; dt:07.09.17 NIB/VVL/SOP/060/R0 dt:05.01.18 Reference:IP-2014, BP-2017	NLT 20 µg/ml (80-125 %)
20.	1. Live attenuated Measles Vaccine 2. Live attenuated Measles Mumps Rubella Vaccine 3. Cell culture Rabies Vaccine 4. Live attenuated Rubella Vaccine 5. Live attenuated Measles & Rubella Vaccine	Abnormal toxicity (Mice and Guinea pig)	NIB/AF/SOP/001/R3;dt. 05.10.17 References:IP 2014, Pg No:27.	Qualitative (Complies/not complies)
21.	1. Cell Culture Rabies Vaccine 6. Hepatitis B (r-DNA) Vaccine	Pyrogen Test (Rabbit Injection)	NIB/AF/SOP/002/R4;dt. 19.07.17 Reference:IP 2014, Pg No:36 NIB/AF/SOP/002/R4;dt. 19.07.17 Reference:BP 2017, Pg No:662 EP 8.0 Pg No:183	Qualitative
22.	1. Cell Culture Rabies Vaccine 2. Live Attenuated Measles Vaccine	Bovine Serum Albumin content by ELISA	NIB/VVL/SOP/043/R0 dt. 22.11.16 Reference:IP 2014 Pg. No. 3136	NMT 50ng/single human dose (0.5ng/ml-32ng/ml)

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	3. Live Attenuated Rubella Vaccine 4. Live Attenuated MMR Vaccine 5. Live attenuated Measles & Rubella Vaccine 6. Inactivated Polio vaccine			
C.	Enzymes			
1.	1. Streptokinase Bulk/Inj 2. Recombinant Streptokinase Inj. 3. Urokinase Bulk/Inj	Identification (Clot Lysis Method A)	NIB/EHL/SOP/04/R3;dt 20.02.18 NIB/EHL/SOP/18/R3;dt. 20.02.18 References:IP 2014, Pg No:2793, 2795, 3380 NIB/EHL/SOP/30/R2;dt. 20.02.18 References:IP 2014, Pg No:2941	Qualitative
2.	1. Streptokinase Bulk/Inj.	Streptolysin activity (UV Vis spectrophotometry)	NIB/EHL/SOP/08/R3;dt 20.02.18 NIB/EHL/SOP/22/R3;dt 20.02.18 References:IP-2014 Pg No:2794,2796	The Absorbance of the supernatant liquid at about 550 nm is NMT 1.5 times the absorbance obtained by repeating the procedure using 0.5ml of the mixture of saline solution and citro-phosphate buffer pH 7.2 in place of the solution containing the substance under examination.

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3.	1. Streptokinase Bulk/Inj. 2. Recombinant Streptokinase Inj. 3. Urokinase Bulk/inj.	Bacterial Endotoxin (Gel Clot method)	NIB/EHL/SOP/11/R3;dt. 20.02.18 Ref:IP 2014 Pg No:2795, 2796, 2942	Qualitative
4.	1. Streptokinase Inj. 2. Recombinant Streptokinase Inj. 3. Urokinase inj.	Sterility (Direct inoculation method)	NIB/STR/SOP/001/R4;dt. 26.02.18 References: IP-2014:Pg No. 2795, 3380, IP 2014:Pg No:2942	Qualitative
5.	1. Streptokinase Bulk/Inj. 2. Recombinant Streptokinase Inj. 3. Urokinase Bulk/Inj.	Abnormal toxicity (Mice)	NIB/AF/SOP/001/R3;dt. 05.10.17 References:IP 2014, Pg No:2795, 3380, 2941	Qualitative Complies/Not complies
6.	Urokinase inj./Bulk	HIV 1&2 antibody (ELISA)	NIB/IDKL/SOP/33/R0;dt. 07.04.17 References:IP 2014, Pg No:3380, 2941	Non-Reactive
		HCV antibody (ELISA)	NIB/IDKL/SOP/33/R0;dt. 07.04.17 References:IP 2014, Pg No:3380, 2941	Non-Reactive
		HBs Ag Marker (ELISA)	NIB/IDKL/SOP/33/R0;dt. 07.04.17 References:IP 2014, Pg No:3380, 2941	Non-Reactive

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<b>D.</b>	<b>Hormones</b>			
1.	1. Human Chorionic Gonadotropin Inj. 2. Menotropin (Human Menopausal Gonadotropin) Inj. 3. Urofollitropin (Human follicle stimulating Hormone) Inj. 4. Recombinant Human Follicle Stimulating Hormone Inj. 5. Somatropin Inj. (Recombinant Human Growth Hormone)	Sterility (Direct inoculation/Membrane Filtration)	NIB/STR/SOP/001/R4;dt. 26.2.18 References: IP-2014:Pg No. 1387 USP 37:Pg No. 3800 BP 2016:Pg No. 3377 EP 8.0:Pg No. 2958	Qualitative
2.	1.Human Chorionic Gonadotropin Bulk/Inj.	Abnormal toxicity (mice)	NIB/AF/SOP/001/R3;dt. 05.10.17 References:IP 2014, Pg No:1387	Qualitative Complies/Not complies
3.	1. Human Chorionic Gonadotropin Bulk/Inj. 2. Menotropin (Human Menopausal Gonadotropin)	Bacterial Endotoxin test by Gel clot method	NIB/EHL/SOP/39/R3;dt. 20.02.18 Ref:IP 2014, Page 1387,1388 Ref:IP Addendum 2016.Pg.no. 4216, Ref:EP 8.0, Page No. 3510 IP Addendum 2016. Pg.no.	Qualitative

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	<b>Bulk/Inj.</b> <b>3. Urofollitropin (Human follicle stimulating Hormone)</b> <b>Bulk/Inj.</b> <b>4. Recombinant Human Follicle Stimulating Hormone Inj.</b> <b>5. Somatropin Inj. (Recombinant Human Growth Hormone)</b>		4321	
4.	<b>1. Human Chorionic Gonadotropin Bulk/Inj.</b>	Identification (Weight gain method)	NIB/EHL/SOP/40/R3;dt. 26.10.17	Qualitative
		Assay (Weight gain method)	Ref:IP 2014 Pg No:1386, 1387, 1388	80-125% of the stated potency
5.	<b>1. Menotropin (Human Menopausal Gonadotropin) Bulk/Inj.</b>	Identification (Weight gain method)	NIB/EHL/SOP/44/R3;dt. 10.05.18	Qualitative
		Assay (FSH activity) (Weight gain method)	NIB/EHL/SOP/45/R2;dt. 20.02.18	80-125%of the stated potency
		Assay (LH activity) (Weight gain method)	IP Addendum 2016, Pg no. 4216-4217	80-125%of the stated potency
6.	<b>1. Urofollitropin (Human follicle stimulating Hormone) Bulk/Inj.</b> <b>2. Recombinant Human Follicle Stimulating Hormone Inj.</b>	Identification (Weight gain method)	NIB/EHL/SOP/46/R2;dt. 20.02.18, Ref:BP 2014 Pg. No 2250	Qualitative
		Assay (Weight gain method)	EP 8.0, 2289 & 3510	80-125%of the stated potency
7.	<b>1. Human Chorionic</b>	HIV 1&2 antibody (ELISA)	NIB/IDKL/SOP/33/R0;dt. 07.04.17	Qualitative

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Gonadotropin Bulk/Inj. 2. Menotropin (Human Menopausal Gonadotropin) Bulk/Inj. 3. Urofollitropin (Human follicle stimulating Hormone) Bulk/Inj.		References:IP 2014, Pg No:3380, 2941 IP Addendum 2016. Pg.no. 4214,4216	
8.	1. Human Chorionic Gonadotropin Bulk/Inj. 2. Menotropin (Human Menopausal Gonadotropin) Bulk/Inj. 3. Urofollitropin (Human follicle stimulating Hormone) Bulk/Inj.	HIV 1&2 antibody (ELISA)	NIB/IDKL/SOP/33/R0;dt. 07.04.17 References:IP 2014, Pg No:3380, 2941 IP Addendum 2016. Pg.no. 4214,4216	Qualitative
9.	1. Human Chorionic Gonadotropin Bulk/Inj. 2. Menotropin (Human Menopausal Gonadotropin) Bulk/Inj.	HBs Ag Marker (ELISA)	NIB/IDKL/SOP/33/R0;dt. 07.04.17 References:IP 2014, Pg No:3380, 2941 IP Addendum 2016. Pg.no. 4214,4216	Qualitative

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	<b>3. Urofollitropin (Human follicle stimulating Hormone) Bulk/Inj.</b>			
<b>E.</b>	<b>Miscellaneous</b>			
<b>1.</b>	<b>Heparin Sodium injection</b>	Identification by Clot delaying method	NIB/EHL/SOP/47/R1;dt. 16.1.17 Ref:IP 2014, Page 1888.	Qualitative
		Bacterial Endotoxin by Gel clot method	NIB/EHL/SOP/11/R3;dt. 20.02.18 Ref:IP 2014 Pg No:1888	Qualitative
		Sterility (Direct Inoculation)	NIB/STR/SOP/001/R4;dt. 26.02.18 References:IP-2014:Pg No. 1888	Qualitative
<b>2.</b>	<b>1. Human albumin 2. Human Plasma Protein Fraction 3. Human Normal Immunoglobulin IV 4. Human Normal Immunoglobulin IM 5. Anti-D Immunoglobulin IV</b>	Sterility (Membrane filtration/Direct Inoculation)	NIB/STR/SOP/01/R3;dt. 26.02. 2016 NIB/STR/SOP/02/R3;dt.26. 02.2016  Reference:IP 2014;2.2.11;Pg No:59-66;(3294, 3298, 3303, 3306, 3309, 3310, 3312, 3322)	Qualitative



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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	6. Anti-D Immunoglobulin IM 7. Human Tetanus immunoglobulin IM 8. Human coagulation Factor VIII plasma derived 9. Human coagulation Factor VIII recombinant 10. Human Coagulation Factor IX 11. Anti-Inhibitor Coagulant complex 12. Fibrin sealant Kit 13. Anti-Thrombin III Concentrate 14. Human Fibrinogen 15. Hepatitis Immunoglobulin IV 16. Hepatitis Immunoglobulin IM			

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	17. Rabies Immunoglobulin IM 18. Human Prothrombin Complex			
3.	1. Human Albumin 2. Plasma Protein Fraction 3. Dried Human Anti hemophilic fraction (factor VIII) 4. Anti-D Immunoglobulin IM 5. Tetanus immunoglobulin IM 6. Human normal immunoglobulin IM 7. Hepatitis B Immunoglobulin IM 8. Rabies Immunoglobulin IM	Abnormal toxicity (Mice and guinea pig)	NIB/AF/SOP/001/R3;dt. 05.10.2017 References: IP 2014;2.2.1;, Pg No:27 (3298, 3306, 3312, 3322).	Qualitative Complies/Not complies
4.	1. Human Albumin 2. Plasma Protein	Pyrogen Test (Rabbit Injection)	NIB/AF/SOP/002/R4;dt. 19.07.2017 Reference:IP 2014;2.2.8;Pg No:36-	Qualitative Complies/Not complies

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Fraction 3. Human Normal Immunoglobulin IV 4. Human Normal Immunoglobulin IM 5. Anti i D Immunoglobulin IM 6. Anti i D Immunoglobulin IV 7. Tetanus Immunoglobulin 8. Dried Human Anti-hemophilic fraction (factor VIII) 9. Human Coagulation Factor IX 10. Anti-Thrombin III Concentrate 11. Human Fibrinogen 12. Hepatitis B Immunoglobulin		37;(3294, 3298, 3305, 3310, 3312, 3322)	

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	IM 13. He patitis B Immunoglobulin IV 14. Rab ies Immunoglobulin IM			
5.	1. Human Normal Immunoglobulin IV 2. Dried Human Anti- hemophilic fraction (factor VIII)	Anti-A, Anti-B Haemagglutinin test (Haemagglutination method)	NIB/BRL/SOP/29/R1;dt. 18.01.2017 Reference:IP 2014, Pg No. 3298, 3313	1:1 to 1:256
6.	1. Human Coagulation Factor VIII Recombinant	Bacterial Endotoxin Test (BET)	NIB/EHL/SOP/28/R3;dt. 06.07.2017 Reference:IP 2014, Pg No. 3309	Qualitative
7.	1. Anti D Immunoglobulin IM	Potency (Agglutination method)	NIB/BPL/SOP/60/R1;dt.28. 03.2017 Reference:IP 2014, Pg No. 318, 319, 3290, 3291	1.14ug/ml (1:256)
<b>F.</b>	<b>Monoclonal Antibodies (Therapeutics)</b>			
1.	Rituximab	Identification (CDC Assay)	NIB/TMA/SOP/10/R1;dt. 16.8.16 References: Manufacturer's drug product release specifications (Doc.ID:NIB/TMA/Product Specifications/01) & Method of Analysis protocol	0.0098ug/ml-2.5ug/ml

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			Method Verification Doc.ID: NIB/TMA/MV001/Rituximab-CDC	
2.	<b>Adalimumab</b>	Identification (L929 Cytotoxicity inhibition bioassay)	NIB/TMA/SOP/35/R1;dt. 18.08.17 References: Manufacturer's drug product release specifications (Doc.ID:NIB/TMA/Product Specifications/01) & Method of Analysis protocol	0.19ng/ml-100ng/ml
3.	<b>Trastuzumab</b>	Identification (Anti-Id Ab ELISA)	NIB/TMA/SOP/37/R0;dt. 22.11.16 References: Manufacturer's drug product release specifications (Doc.ID:NIB/TMA/Product Specifications/01) & Method of Analysis protocol	0.1µg/ml-10µg/ml
4.	<b>Bevacizumab</b>	Identification (Binding Activity of VEGF by ELISA)	NIB/TMA/SOP/45/R0;dt. 24.02.17 References: Manufacturer's drug product release specifications (Doc.ID:NIB/TMA/Product Specifications/01) & Method of Analysis protocol	1.56ng/ml-200ng/ml
5.	<b>Rituximab</b>	Assay/Potency (CDC Assay)	NIB/TMA/SOP/10/R1;dt. 16.8.16 References: Manufacturer's drug product release specifications	0.0098ug/ml-2.5ug/ml

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			(Doc.ID:NIB/TMA/Product Specifications/01) &Method of Analysis protocol	
6.	<b>Adalimumab</b>	Assay/Potency (L929 Cytotoxicity inhibition bioassay)	NIB/TMA/SOP/35/R1;dt. 18.08.17 References: Manufacturer's drug product release specifications (Doc.ID:NIB/TMA/Product Specifications/01) &Method of Analysis protocol	0.19ng/ml-100ng/ml
7.	<b>Trastuzumab</b>	Assay/Potency (Inhibition of cell Proliferation assay)	NIB/TMA/SOP/40/R0;dt. 19.12.16 References: Manufacturer's drug product release specifications (Doc.ID:NIB/TMA/Product Specifications/01) &Method of Analysis protocol	0.002µg/ml-0.25µg/ml
		Assay/Potency (HER2 Binding assay by flow cytometry)	NIB/TMA/SOP/39/R0;dt. 19.12.16 References: Manufacturer's drug product release specifications (Doc.ID:NIB/TMA/Product Specifications/01) &Method of Analysis protocol	0.04µg/ml-20µg/ml
8.	<b>Bevacizumab</b>	Assay/Potency (Bioassay)	NIB/TMA/SOP/47/R0;dt. 21.04.17 References:	40ng/ml-1000ng/ml

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			Manufacturer's drug product release specifications (Doc.ID:NIB/TMA/Product Specifications/01) & Method of Analysis protocol	
9.	1. Rituximab 2. Adalimumab 3. Trastuzumab 4. Bevacizumab	Bacterial Endotoxin (Gel Clot Method)	NIB/EHL/SOP/28/R3; dt. 06.07.2017 Reference: IP 2014, Page 28-31 Appendix:2.2.3	Positive/Negative
10.	1. Rituximab 2. Adalimumab 3. Trastuzumab 4. Bevacizumab	Sterility (Membrane Filtration/Direct Inoculation)	NIB/STR/SOP/001/R4; dt. 26.2.18 Reference: IP 2014, 2.2.11	Pass/Fail
<b>G.</b>	<b>Test Kits/Rapid tests: Immunodiagnostic Kits</b>			
1.	HIV 1 & 2 Antibody	Rapid test	NIB/IDKL/SOP/12/R6, Effective date:21.05.18 NIB/IDKL/SOP/24/R6, Effective date:21.05.18 References As per CDSCO letter No.29/Misc./4/2016-DC(65), Dt:12.07.2017	Positive/Negative
2.	Hepatitis B	Rapid test	NIB/IDKL/SOP/17/R6, Effective date:17.05.18	Positive/Negative

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			NIB/IDKL/SOP/24/R6, Effective date:21.05.18 References As per CDSCO letter No.29/Misc./4/2016- DC(65), Dt:12.07.2017	
3.	<b>Hepatitis C Antibody</b>	Rapid test	NIB/IDKL/SOP/15/R6, Effective date:21.05.18 NIB/IDKL/SOP/24/R5, Effective date:19/5/2014 References As per CDSCO letter No.29/Misc./4/2016- DC(65),Dt:12.07.2017	Positive/Negative
4.	<b>Syphilis</b>	Rapid test	NIB/IDKL/SOP/27/R1, Effective date:15.05.18 References As per CDSCO letter No.29/Misc./4/2013- DC(52), Dt:14.02.2014	Positive/Negative
5.	<b>Hepatitis C</b>	CLIA	NIB/IDKL/SOP/35/R0 dt:17.05.17 NIB/IDKL/SOP/34/R0 dt:19.05.17 References As per CDSCO letter No.29/Misc./4/2016- DC(65),Dt:12.07.2017	Positive/Negative
6.	<b>HIV 1 &amp;/2 Antibody</b>	CLIA	NIB/IDKL/SOP/36/R0 dt:19.05.17 NIB/IDKL/SOP/34/R0 dt:19.05.17	Positive/Negative



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			References As per CDSCO letter No.29/Misc./4/2016-DC(65), Dt:12.07.2017	
7.	<b>Syphilis</b>	CLIA	NIB/IDKL/SOP/37/R0 dt:17.05.17 NIB/IDKL/SOP/34/R0 dt:19.05.17 References As per CDSCO letter No.29/Misc./4/2016-DC(65), Dt:12.07.2017	Positive/Negative
8.	<b>Hepatitis B</b>	CLIA	NIB/IDKL/SOP/38/R0 dt:17.05.17 NIB/IDKL/SOP/34/R0 dt:19.05.17 References As per CDSCO letter No.29/Misc./4/2016-DC(65), Dt:12.07.2017	Positive/Negative
9.	<b>Hepatitis C</b>	ELFA	NIB/IDKL/SOP/40/R0 dt:05.08.16 NIB/IDKL/SOP/39/R0 dt:05.08.16 References As per CDSCO letter No.29/Misc./4/2016-DC(65), Dt:12.07.2017	Positive/Negative
10.	<b>Hepatitis B</b>	ELFA	NIB/IDKL/SOP/42/R0 dt:08.08.16 NIB/IDKL/SOP/39/R0 dt:05.08.16 References As per CDSCO letter No.29/Misc./4/2016-	Positive/Negative

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11.	HIV 1 &/2 Antibody	ELFA	DC(65), Dt:12.07.2017 NIB/IDKL/SOP/41/R0 dtr:05.08.16 NIB/IDKL/SOP/39/R0 dt:05.08.16 References As per CDSCO letter No.29/Misc./4/2016- DC(65),Dt:12.07.2017	Positive/Negative
<b>H.</b>	<b>ELISA:Immunodiagnostic Kits</b>			
1.	HIV 1 &/2 Antibody	ELISA	NIB/IDKL/SOP/13/R6, Effective date:14.05.18 NIB/IDKL/SOP/22/R6, Effective date:21.05.18 References As per CDSCO letter No.29/Misc./4/2016- DC(65), Dt:12.07.2017	Positive/Negative
2.	HIV 1 &/2 Antibody Western Blot	Confirmatory assays	NIB/IDKL/SOP/14/R6, Effective date:14.05.18 NIB/IDKL/SOP/23/R5, Effective date:26/5/2014 References As per manufacturer specifications	Positive/Negative
3.	Hepatitis B	ELISA	NIB/IDKL/SOP/18/R6, Effective date:17.05.18 NIB/IDKL/SOP/22/R6, Effective date:21.05.18 References As per CDSCO letter No.29/Misc./4/2016- DC(65), Dt:12.07.2017	Positive/Negative
4.	Hepatitis B Neutralization	Confirmatory assays	NIB/IDKL/SOP/25/R6, Effective date:21.05.18	Positive/Negative

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			References As per manufacturer specifications	
5.	Hepatitis C Antibody	ELISA	NIB/IDKL/SOP/16/R6, Effective date:17.05.18 NIB/IDKL/SOP/22/R6, Effective date:21.05.18 References As per CDSCO letter No.29/Misc./4/2016-DC(65), Dt:12.07.2017	Positive/Negative
6.	Hepatitis C Antibody	Confirmatory assays	NIB/IDKL/SOP/23/R6, Effective date:21.05.18 References As per manufacturer specifications	Positive/Negative
7.	Syphilis	ELISA	NIB/IDKL/SOP/32/R0, Effective date:15.03.17 References As per CDSCO letter No.29/Misc./4/2013-DC(52), Dt:14.02.2014	Positive/Negative
7.	Anti-HBc Total	ELISA	NIB/IDKL/SOP/28/R1, Effective date:22.09.17 References As per manufacturer specifications	Positive/Negative
8.	Anti-HBc IgM	ELISA	NIB/IDKL/SOP/29/R1, Effective date:22.09.17 References As per manufacturer specifications	Positive/Negative
9.	HBe Ag/HBe Ag-Ab/Anti-HBe	ELISA	NIB/IDKL/SOP/30/R1, Effective date:22.09.17	Positive/Negative

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			References As per manufacturer specifications	
10.	Anti-HBs	ELISA	NIB/IDKL/SOP/31/R1, Effective date:22.09.17 References As per manufacturer specifications	Positive/Negative
I.	<b>Qualitative PCR:Molecular Diagnostic Kit</b>			
1.	Blood donor screening multiplex (HBV, HCV & HIV) molecular diagnostic test (Qualitative)	Sensitivity	NIB/MDL/SOP/15/R1;dt. 30.08.2016 References:Manufacturer's Specifications	Positive/Negative
		Specificity		
2.	Infection Diagnostic test for HIV-1 (Qualitative)	Sensitivity	NIB/MDL/SOP/12/R1;dt. 07.09.2016 References:Manufacturer's Specifications	Positive/Negative
		Specificity		
3.	Infection Diagnostic test for HCV (Qualitative)	Sensitivity	NIB/MDL/SOP/14/R1;dt. 07.09.2016 References:Manufacturer's Specifications	Positive/Negative
		Specificity		
I.	<b>Immunological Products:Blood Grouping Reagents</b>			
1.	Anti-A (Monoclonal)	Potency (Titer) (Haemagglutination method)	NIB/BRL/SOP/18/R2;dt. 22.09.17 References:Indian Pharmacopoeia 2014	1:64 to 1:4096
2.	Anti-B (Monoclonal)		NIB/BRL/SOP/19/R2;dt. 22.09.17 References:Indian Pharmacopoeia 2014	1:128 to 1:4096
3.	Anti-A,B		NIB/BRL/SOP/20/R2;dt.	1:128 to 1:4096

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	(Monoclonal)		22.09.17 References:Transfusion Medicine Technical Manual-2003, Indian Pharmacopoeia 2014 and as per manufacturer's specifications	
4.	Anti-D(IgM) (Monoclonal)		NIB/BRL/SOP/22/R2;dt. 22.09.17 References:Transfusion Medicine Technical Manual-2003, Indian Pharmacopoeia 2014 and as per manufacturer's specifications	1:64 to 1:256
5.	Anti-D(IgM+IgG) (Monoclonal)		NIB/BRL/SOP/23/R2;dt. 22.09.17 References:Transfusion Medicine Technical Manual-2003, Indian Pharmacopoeia 2014 and as per manufacturer's specifications	1:32 to 1:512
6.	Anti-D(IgG) (Monoclonal)		NIB/BRL/SOP/21/R2;dt. 22.09.17 References:Indian Pharmacopoeia 2014 and as per manufacturer's specifications	1:32 to 1:256
7.	Anti-A <sub>1</sub> (Lectin)		NIB/BRL/SOP/24/R2;dt. 22.09.17 References:Based on NIB data and recommendations	1:8 to 1:128

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			of experts	
8.	Anti-H (Lectin)	Potency (Titer) (Haemagglutination method)	NIB/BRL/SOP/25/R2;dt. 22.09.17 References:Based on NIB data and recommendations of experts	1:8 to 1:128
9.	Anti-Fy <sup>a</sup> reagent		NIB/BRL/SOP/066/00;-. 22.09.17 Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	1:8 to 1:512
10.	Anti-Jk <sup>a</sup> reagent		NIB/BRL/SOP/066/00;-. 22.09.17 Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	1:8 to 1:512
11.	Anti-K reagent		NIB/BRL/SOP/066/00;-. 22.09.17 Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	1:8 to 1:512
12.	Anti-k reagent		NIB/BRL/SOP/066/00;-. 22.09.17 Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	1:8 to 1:512
13.	Anti-Le <sup>a</sup> reagent	Potency (Titer) (Haemagglutination method)	NIB/BRL/SOP/066/00;-. 22.09.17 Indian Pharmacopoeia	Neat to 1:512

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			2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	
14.	Anti-Le <sup>b</sup> reagent		NIB/BRL/SOP/066/00;-. 22.09.17 Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	Neat to 1:512
15.	Anti-Pi reagent		NIB/BRL/SOP/066/00;-. 22.09.17 Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	1:4 to 1:512
16.	Anti-M reagent		NIB/BRL/SOP/066/00;-. 22.09.17 Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	1:4 to 1:512
17.	Anti-N reagent		NIB/BRL/SOP/066/00;-. 22.09.17 Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	Neat to 1:512
18.	Anti-S reagent	Potency (Titer) (Haemagglutination method)	NIB/BRL/SOP/066/00;-. 22.09.17 Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	1:4 to 1:512
19.	Anti-A (Monoclonal)	Avidity (Haemagglutination)	NIB/BRL/SOP/18/R2;dt. 22.09.17	1-6 sec

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		method)	References:Indian Pharmacopoeia 2014	
20.	Anti-B (Monoclonal)		NIB/BRL/SOP/19/R2;dt. 22.09.17 References:Indian Pharmacopoeia 2014	1-6 sec
21.	Anti-A,B (Monoclonal)		NIB/BRL/SOP/20/R2;dt. 22.09.17 References:Transfusion Medicine Technical Manual-2003, Indian Pharmacopoeia 2014 and as per manufacturer's specifications	1-6 sec
22.	Anti-D(IgM) (Monoclonal)		NIB/BRL/SOP/22/R2;dt. 22.09.17 References:Transfusion Medicine Technical Manual-2003, Indian Pharmacopoeia 2014 and as per manufacturer's specifications	5-10 sec
23.	Anti-D(IgM+IgG) (Monoclonal)		NIB/BRL/SOP/23/R2;dt. 22.09.17 References:Transfusion Medicine Technical Manual-2003, Indian Pharmacopoeia 2014 and as per manufacturer's specifications	10-20 Sec
24.	Anti-A (Monoclonal)	Intensity (Haemagglutination	NIB/BRL/SOP/18/R2;dt. 22.09.17	Positive/Negative



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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		method)	References:Indian Pharmacopoeia 2014	
25.	Anti-B (Monoclonal)		NIB/BRL/SOP/19/R2;dt. 22.09.17 References:Indian Pharmacopoeia 2014	Positive/Negative
26.	Anti-A,B (Monoclonal)		NIB/BRL/SOP/20/R2;dt. 22.09.17 References:Transfusion Medicine Technical Manual-2003, Indian Pharmacopoeia 2014 and as per manufacturer's specifications	Positive/Negative
27.	Anti-D(IgM) (Monoclonal)		NIB/BRL/SOP/22/R2;dt. 22.09.17 References:Transfusion Medicine Technical Manual-2003, Indian Pharmacopoeia 2014 and as per manufacturer's specifications	Positive/Negative
28.	Anti-D(IgM+IgG) (Monoclonal)		NIB/BRL/SOP/23/R2;dt. 22.09.17 References:Transfusion Medicine Technical Manual-2003, Indian Pharmacopoeia 2014 and as per manufacturer's specifications	Positive/Negative
29.	Anti-A <sub>1</sub> (Lectin)		NIB/BRL/SOP/24/R2;dt. 22.09.17	Positive/Negative

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			References:Based on NIB data and recommendations of experts	
30.	Anti-H(Lectin)		NIB/BRL/SOP/25/R2;dt. 22.09.17 Reference:Based on NIB data and recommendations of experts	Positive/Negative
31.	Anti-A (Monoclonal)	Specificity (Haemagglutination method)	NIB/BRL/SOP/18/R2;dt. 22.09.17 References:Indian Pharmacopoeia 2014	Positive/Negative
32.	Anti-B (Monoclonal)		NIB/BRL/SOP/19/R2;dt. 22.09.17 References:Indian Pharmacopoeia 201	Positive/Negative
33.	Anti-A,B (Monoclonal)		NIB/BRL/SOP/20/R2;dt. 22.09.17 References:Transfusion Medicine Technical Manual-2003, Indian Pharmacopoeia 2014 and as per manufacturer's specifications	Positive/Negative
34.	Anti-D(IgM) (Monoclonal)	Specificity (Haemagglutination method)	NIB/BRL/SOP/22/R2;dt. 22.09.17 References:Transfusion Medicine Technical Manual-2003, Indian Pharmacopoeia 2014 and as per manufacturer's specifications	Positive/Negative
35.	Anti-D(IgM+IgG) (Monoclonal)		NIB/BRL/SOP/23/R2;dt. 22.09.17	Positive/Negative

**Bhumi Rajyaguru**  
Convenor

**Alok Jain**  
Program Manager

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			References:Transfusion Medicine Technical Manual-2003, Indian Pharmacopoeia 2014 and as per manufacturer's specifications	
36.	Anti-D(IgG) (Monoclonal)		NIB/BRL/SOP/21/R2;dt. 22.09.17 References:Indian Pharmacopoeia 2014 and as per manufacturer's specifications	Positive/Negative
37.	Anti-A <sub>1</sub> (Lectin)	Specificity (Haemagglutination method)	NIB/BRL/SOP/24/R2; dt. 22.09.17 References:Based on NIB data and recommendations of experts	Positive/Negative
38.	Anti-H (Lectin)		NIB/BRL/SOP/25/R2;dt.22.09.17 References:Based on NIB data and recommendations of experts	Positive/Negative
39.	Gel card for Forward grouping		NIB/BRL/SOP/055/R2;dt. 22.09.17 References:Transfusion Medicine Technical Manual 2003 and as per manufacturer's specifications	Positive/Negative
40.	Anti-Fy <sup>a</sup> reagent		NIB/BRL/SOP/066/00;- Dt 22.09.17 References:Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research	Positive/Negative

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			(21 CFR-660.25	
41.	Anti-Jk <sup>a</sup> reagent		NIB/BRL/SOP/066/00;- . Dt 22.09.17 References:Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	Positive/Negative
42.	Anti-K reagent	Specificity (Haemagglutination method)	NIB/BRL/SOP/066/00;- . Dt 22.09.17 References:Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	Positive/Negative
43.	Anti-k reagent	Specificity (Haemagglutination method)	NIB/BRL/SOP/066/00;- . Dt 22.09.17 References:Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	Positive/Negative
44.	Anti-Le <sup>a</sup> reagent		NIB/BRL/SOP/066/00;- . Dt 22.09.17 References:Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	Positive/Negative
45.	Anti-Le <sup>b</sup> reagent		NIB/BRL/SOP/066/00;- . Dt 22.09.17 References:Indian Pharmacopoeia 2014 and	Positive/Negative

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			Centre for Biologics Evaluation and Research (21 CFR-660.25)	
46.	Anti-Pi reagent		NIB/BRL/SOP/066/00;- Dt 22.09.17 References: Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	Positive/Negative
47.	Anti-M reagent		NIB/BRL/SOP/066/00;- Dt 22.09.17 References: Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	Positive/Negative
48.	Anti-N reagent	Specificity (Haemagglutination method)	NIB/BRL/SOP/066/00;- Dt 22.09.17 References: Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	Positive/Negative
49.	Anti-S reagent		NIB/BRL/SOP/066/00;- Dt 22.09.17 References: Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	Positive/Negative
50.	Anti-A (Monoclonal)	Reactivity Rouleaux/Haemolysis/Prozone* (Haemagglutination method)	NIB/BRL/SOP/18/R2; dt. 22.09.17 References: Indian Pharmacopoeia 2014	Present/Absent

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
51.	Anti-B (Monoclonal)		NIB/BRL/SOP/19/R2;dt. 22.09.17 References:Indian Pharmacopoeia 2014	Present/Absent
52.	Anti-AB (Monoclonal)		NIB/BRL/SOP/20/R2;dt. 22.09.17 References:Transfusion Medicine Technical Manual-2003, Indian Pharmacopoeia 2014 and as per manufacturer's specifications	Present/Absent
53.	Anti-D(IgM) (Monoclonal)		NIB/BRL/SOP/22/R2;dt. 22.09.17 References:Transfusion Medicine Technical Manual-2003, Indian Pharmacopoeia 2014 and as per manufacturer's specifications	Present/Absent
54.	Anti-D(IgM + IgG) (Monoclonal)	Reactivity Rouleaux/Haemolysis/Pro zone* (Haemagglutination method)	NIB/BRL/SOP/23/R2;dt. 22.09.17 References:Transfusion Medicine Technical Manual-2003, Indian Pharmacopoeia 2014 and as per manufacturer's specifications	Present/Absent
55.	Anti-D (IgG)* (Monoclonal)		NIB/BRL/SOP/21/R2;dt. 22.09.17 References:Indian Pharmacopoeia 2014 and as per manufacturer's specifications	Present/Absent
56.	Anti-A <sub>1</sub> (Lectin)		NIB/BRL/SOP/24/R2;dt.22.	Present/Absent

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			09.17 References:Based on NIB data and recommendations of experts	
57.	Anti-H (Lectin)		NIB/BRL/SOP/25/R2;dt.22.09.17 References:Based on NIB data and recommendations of experts	Present/Absent
58.	Anti-Fy <sup>a</sup> reagent*		NIB/BRL/SOP/066/00;- . Dt 22.09.17 Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	Present/Absent
59.	Anti-Jk <sup>a</sup> reagent*	Reactivity Rouleaux/Haemolysis/Prozone* (Haemagglutination method)	NIB/BRL/SOP/066/00;- . Dt 22.09.17 References:Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	Present/Absent
60.	Anti-K reagent*		NIB/BRL/SOP/066/00;- . Dt 22.09.17 References:Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	Present/Absent
61.	Anti-k reagent*		NIB/BRL/SOP/066/00;- . Dt 22.09.17 References:Indian Pharmacopoeia 2014 and	Present/Absent

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			Centre for Biologics Evaluation and Research (21 CFR-660.25)	
62.	Anti-Le <sup>a</sup> reagent*		NIB/BRL/SOP/066/00;- Dt 22.09.17 References:Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	Present/Absent
63.	Anti-Le <sup>b</sup> reagent*		NIB/BRL/SOP/066/00;- Dt 22.09.17 References:Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	Present/Absent
64.	Anti-Pi reagent*	Reactivity Rouleaux/Haemolysis/Pro zone* (Haemagglutination method)	NIB/BRL/SOP/066/00;- Dt 22.09.17 References:Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	Present/Absent
65.	Anti-M reagent*		NIB/BRL/SOP/066/00;- Dt 22.09.17 References:Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	Present/Absent
66.	Anti-N reagent*		NIB/BRL/SOP/066/00;- Dt 22.09.17 References:Indian Pharmacopoeia 2014 and	Present/Absent



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			Centre for Biologics Evaluation and Research (21 CFR-660.25)	
67.	Anti-S reagent*		NIB/BRL/SOP/066/00;- Dt 22.09.17 References: Indian Pharmacopoeia 2014 and Centre for Biologics Evaluation and Research (21 CFR-660.25)	Present/Absent
J.	<b>Other Specified Tests: Biochemical Kits</b>			
1.	<b>Automated analyzer based Glucose Reagent Kit</b>	Linearity and Range evaluation of Glucose estimation based on Colorimetry	NIB/BKL/SOP/08/R2;dt. 06.07.17 Reference: CLSI EP6-A, Vol 23 No.16 Evaluation of Linearity of Quantitative Measurement Procedures: A Statistical Approach Guideline	40-400 mg/dl
2.	<b>Automated analyzer based Glucose Reagent Kit</b>	TEa (Allowable Total Error limits) evaluation of Glucose estimation based on Colorimetry	NIB/BKL/SOP/09/R2;dt. 06.07.17 NIB/BKL/SOP/10/R2;dt. 06.07.17 Reference: CLSI EP5-A2, Vol24 No.25 Evaluation of Precision performance of Quantitative Measurement Methods; Approved Guideline  CLSI EP9-A2, Vol22 No.19 Method Comparison and Bias Estimation Using Patient Samples; Approved Guideline	+/-10 % deviation from the 'Reference Method' values

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			CLSI EP21-A, Vol23 No.20 Estimation of Total Analytical Error for Clinical Laboratory Methods; Approved Guideline [Limits prescribed by Clinical Laboratory Improvement Amendments (CLIA) and American Association of Bioanalysts (AAB)]	
3.	<b>Blood Glucose Test Strips for Glucometers</b>	Intermediate Precision evaluation of blood glucose results from glucometers	NIB/BKL/SOP/14/R2;dt. 06.07.17 Reference:ISO15197 In-vitro diagnostic test systems-Requirements for blood-glucose monitoring systems for self-testing in managing diabetes mellitus	≤ 7.1
4.	<b>Blood Glucose Test Strips for Glucometers</b>	Repeatability Precision evaluation of blood glucose results from glucometers	NIB/BKL/SOP/15/R2;dt. 06.07.17 Reference:ISO15197 In-vitro diagnostic test systems-Requirements for blood-glucose monitoring systems for self-testing in managing diabetes mellitus	≤ 7.1
5.	<b>Blood Glucose Test Strips for</b>	Accuracy/Bias evaluation of blood glucose results	NIB/BKL/SOP/13/R2;dt. 20.02.18	95% of glucometer results fall within +/-

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	<b>Glucometers</b>	from glucometers by Method comparison	Reference:ISO15197 Invitro diagnostic test systems-Requirements for blood-glucose monitoring systems for self-testing in managing diabetes mellitus CLSI EP9-A2, Vol22 No.19 Method Comparison and Bias Estimation Using Patient Samples;Approved Guideline WHO:Laboratory Diagnosis and Monitoring of Diabetes Mellitus, 2002	15mg/dL of those from 'Reference Method' at glucose levels <75mg/dL and within+/-20 % at glucose levels >75mg/dL  Maximum deviation is within +/-15%

### CHEMICAL TESTING

<b>I.</b>	<b>DRUGS AND PHARMACEUTICALS</b>			
<b>A.</b>	<b>Parenteral Preparations:Recombinant Products</b>			
<b>1.</b>	<b>1. Soluble Insulin</b> <b>2. Isophane Insulin</b> <b>3. Biphasic Isophane Insulin (25/75)</b> <b>4. Biphasic Isophane Insulin (30/70)</b> <b>5. Biphasic</b>	Identification (RP-HPLC)	NIB/RPL/SOP/54/R2 28.10.16 References: IP 2014	Qualitative

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Isophane Insulin (50/50) 6. rh-Insulin Bulk			
2.	Insulin Glargine	Identification (RP-HPLC)	NIB/RPL/SOP/40/R5;24.05.18 Reference: IP Addendum 2016	Qualitative
		Identification (RP-HPLC)	NIB/RPL/SOP/102/R0;28.03.17 Reference: Manufacturer's specifications	Qualitative
3.	1. Insulin Lispro 2. Insulin Lispro & Insulin Lispro Protamine Suspension (25/75) 3. Insulin Lispro & Insulin Lispro Protamine Suspension (50/50)	Identification (RP-HPLC)	NIB/RPL/SOP/49/R2;-30.09.16 NIB/RPL/SOP/54/R2;28.10.16 References:IP 2014	Qualitative
4.	1. Insulin Aspart 2. Insulin Aspart & Insulin Aspart Protamine Suspension (30/70) 3. Insulin Aspart & Insulin Aspart Protamine	Identification (RP-HPLC)	NIB/RPL/SOP/51/R2;-30.09.16 NIB/RPL/SOP/54/R2;-28.10.16 References:IP 2014	Qualitative

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	<b>Suspension (50/50)</b>			
5.	<b>Insulin Detemir</b>	Identification (RP-HPLC)	NIB/RPL/SOP/50/R2;, 30.9.16 Reference: Manufacturer's specifications	Qualitative
6.	<b>Insulin Degludec</b>	Identification (RP-HPLC)	NIB/RPL/SOP/80/R0;25.01.18 Reference: Manufacturer's specifications	Qualitative
7.	<b>Insulin Degludec/Insulin Aspart</b>	Identification Degludec (RP-HPLC)	NIB/RPL/SOP/80/R0;25.01.18 Reference: Manufacturer's specifications	Qualitative
		Identification Aspart (RP-HPLC)	NIB/RPL/SOP/97/R0;28.03.17 Reference: Manufacturer's specifications	Qualitative
8.	<b>Exenatide</b>	Identification (SEC-HPLC)	NIB/RPL/SOP/67/R2;30.9.16, Reference: Manufacturer's specifications	Qualitative
9.	<b>Exenatide Once Weekly</b>	Identification (Strong Cation Exchange-HPLC)	NIB/RPL/SOP/100/R0;-28.03.17, Reference: Manufacturer's specifications	Qualitative
10.	<b>Liraglutide</b>	Identification (RP-HPLC)	NIB/RPL/SOP/84/R0;- 24.01.18, Reference:Manufacturer's specifications	Qualitative
11.	<b>rh-Erythropoietin</b>	Identification	NIB/RPL/SOP/47/	Qualitative

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		(SDS-PAGE followed by Immunoblotting)	R3;- 05.03.18, References:IP 2014	
12.	<b>Filgrastim</b>	Identification (SDS-PAGE)	NIB/RPL/SOP/47/ R3;- 05.03.18, References:IP 2014 (Appendix 2.4.12),	Qualitative
		Identification (SEC-HPLC)	NIB/RPL/SOP/70/ R3;- 06.03.18, References: IP 2014 (Appendix 2.4.12),	Qualitative
13.	<b>Interferon Beta-1a</b>	Identification (SDS-PAGE)	NIB/RPL/SOP/79/R1;- 22.05.18;Manufacturer's specifications	Qualitative
		Identification (RP-HPLC)	NIB/RPL/SOP/74/R0;- 21.10.16;Manufacturer's specifications	Qualitative
14.	<b>Interferon Alpha-2b</b>	Identification (SDS-PAGE)	NIB/RPL/SOP/79/R1;- 22.05.18;References:IP 2014	Qualitative
		Identification (RP-HPLC)	NIB/RPL/SOP/89/R0;- 30.06.16;References:IP 2014	Qualitative
15.	<b>Peg-Filgrastim</b>	Identification (SDS-PAGE, Non Reducing)	NIB/RPL/SOP/96/R0;- 27.03.17;Manufacturer's specifications	Qualitative
		Identification (RP-HPLC)	NIB/RPL/SOP/95/R0;- 27.03.17;Manufacturer's specifications	Qualitative
		Identification (SEC-HPLC)	NIB/RPL/SOP/94/R0;- 28.03.17;Manufacturer's specifications	Qualitative
16.	<b>Peg-Interferon Alpha-2b</b>	Identification (SDS-PAGE)	NIB/RPL/SOP/96/R0;- 27.03.17;Manufacturer's specifications	Qualitative

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17.	<b>Teriparatide (rh-PTH)</b>	Identification (SDS-PAGE)	NIB/RPL/SOP/47/R3;-. 05.03.18;Manufacturer's specifications	Qualitative
		Identification (RP-HPLC)	NIB/RPL/SOP/90/R0;-. 30.06.16;Manufacturer's specifications	Qualitative
18.	<b>Peg-Interferon beta-1a</b>	Identification (Peptide mapping)	NIB/RPL/SOP/28/R1 dt.. 24.05.18;Manufacturer's specifications	Qualitative
19.	1. <b>Soluble Insulin</b> 2. <b>Isophane Insulin</b> 3. <b>Biphasic Isophane Insulin (25/75)</b> 4. <b>Biphasic Isophane Insulin (30/70)</b> 5. <b>Biphasic Isophane Insulin (50/50)</b> 6. <b>rh-Insulin Bulk</b>	Assay/Potency (RP-HPLC)	NIB/RPL/SOP/54/R2 28.10.16 NIB/RPL/SOP/13/R5 dt:30.09.16 References:IP-2014	90-110%
20.	<b>Isophane Insulin</b>	Insulin in the supernatant (RP-HPLC)	NIB/RPL/SOP/13/R5 dt:30.09.16 Reference IP 2014	NMT 2.5% of total insulin content
21.	1. <b>Biphasic Isophane Insulin (25/75)</b> 2. <b>Biphasic Isophane Insulin (30/70)</b> 3. <b>Biphasic</b>	Soluble human insulin content (RP-HPLC)	NIB/RPL/SOP/72/R1;-. 30.09.16 References:IP 2014	a) 25/75 (20-30%) b) 30/70 (25-35%) c) 50/50 (45-55%)

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	<b>Isophane Insulin (50/50)</b>			
22.	<b>Insulin Glargine</b>	Assay/Potency (RP-HPLC)	NIB/RPL/SOP/40/R5;- 24.05.18 Reference: IP Addendum 2016	95-105%
		Assay/Potency (RP-HPLC)	NIB/RPL/SOP/102/R0;- 28.03.17 Reference: Manufacturer's specifications	NLT 95% and NMT 105%
23.	1. <b>Insulin Lispro</b> 2. <b>Insulin Lispro&amp; Insulin Lispro Protamine Suspension (25/75)</b> 3. <b>Insulin Lispro&amp; Insulin Lispro Protamine Suspension (50/50)</b>	Assay/Potency (RP-HPLC)	NIB/RPL/SOP/49/R2;- 30.9.16 Reference:IP 2014	95-105%
24.	1. <b>Insulin Lispro&amp; Insulin Lispro Protamine Suspension (25/75)</b> 2. <b>Insulin Lispro&amp; Insulin Lispro Protamine Suspension (50/50)</b>	Soluble Insulin lispro content (RP-HPLC)	NIB/RPL/SOP/49/R2;- 30.9.16 References: IP 2014&IP Addendum 2015	1. For 25/75 formulation:15-30 U/ml 2. L-10 to L+5 i.e. For 50/50 formulation 40-55 U/ml
25.	1. <b>Insulin Aspart</b>	Assay/Potency (RP-HPLC)	NIB/RPL/SOP/51/R2;- 30.9.16	90-110%



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	2. Insulin Aspart & Insulin Aspart Protamine Suspension (30/70) 3. Insulin Aspart & Insulin Aspart Protamine Suspension (50/50)		References:IP 2014	
26.	1. Insulin Aspart & Insulin Aspart Protamine Suspension (30/70) 2. Insulin Aspart & Insulin Aspart Protamine Suspension (50/50)	Insulin aspart in solution (SEC-HPLC)	NIB/RPL/SOP/51/R2;-. 30.9.16 References:IP 2014 &IP Addendum 2015	For 30/70:24-36% For 50/50:42-58%
27.	Insulin Detemir	Assay/Potency (RP-HPLC)	NIB/RPL/SOP/50/R2;-. 30.09.16 Reference: Manufacturer's specifications	95-105%
28.	Insulin Degludec	Assay/Potency (RP-HPLC)	NIB/RPL/SOP/80/R0;-. 25.01.18 Reference: Manufacturer's specifications	95.0-105.0%
29.	Insulin Degludec/Insulin Aspart	Assay/Potency (RP-HPLC)	NIB/RPL/SOP/80/R0;-. 25.01.18 Reference: Manufacturer's specifications	Degludec:95.0-105.0% Aspart:95.0-105.0%

**Bhumi Rajyaguru**  
Convenor

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30.	<b>Exenatide</b>	Assay/Potency (SEC-HPLC)	NIB/RPL/SOP/67/R2;-. 30.9.16 Reference: Manufacturer's specifications	NLT 95% and NMT 105%
31.	<b>Exenatide Once Weekly</b>	Assay/Potency (SEC-HPLC)	NIB/RPL/SOP/101/R0;-. 28.03.17 Reference: Manufacturer's specifications	NLT 90% and NMT 110%
		In vitro Initial Release (SEC-HPLC)	NIB/RPL/SOP/98/R0;-. 28.03.17 Reference: Manufacturer's specifications	NMT 1.5%
		In vitro Complete Release (SEC-HPLC)	NIB/RPL/SOP/99/R0;-. 28.03.17 Reference: Manufacturer's specifications	Day 31:NLT 30% & NMT 50%
32.	<b>Liraglutide</b>	Assay/Potency (RP-HPLC)	NIB/RPL/SOP/84/R0;-. 24.01.18, Reference: Manufacturer's specifications	NLT 88.4% and NMT 105.0%
33.	<b>Teriparatide</b>	Assay/Potency (RP-HPLC)	NIB/RPL/SOP/90/R0;-. 30.06.16, Reference: Manufacturer's specifications	NLT 95.0% and NMT 105.0%
34.	1. <b>Soluble Insulin</b> 2. <b>Isophane Insulin</b> 3. <b>Biphasic</b>	Related Proteins (RP-HPLC)	NIB/RPL/SOP/13/R5 dt:30.09.16  NIB/RPL/SOP/45/R2;-. 30.9.16, References:	A21 Desamido HI:NMT 5% of total areas of peaks Sum of areas of any other peaks apart from

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	<b>Isophane Insulin (25/75)</b> <b>4. Biphasic Isophane Insulin (30/70)</b> <b>5. Biphasic Isophane Insulin (50/50)</b> <b>6. rh-Insulin Bulk</b>		IP-2014	HI & A21 desamido HI:NMT 6% of total areas of peaks
35.	<b>Insulin Glargine</b>	Related Proteins (RP-HPLC)	NIB/RPL/SOP/40/R5;- 24.05.18, Reference: IP Addendum 2016	O-A Arg insulin Glargine:NMT 5% Sum of areas of any other peaks apart from Insulin Glargine & O-A Arg insulin Glargine:NMT 6% of total areas of peaks
		Related Proteins (RP-HPLC)	NIB/RPL/SOP/102/R0;- 28.03.17 Reference: Manufacturer's specifications	21 <sup>A</sup> -desamido insulin glulisine≤ 1.0% Any other single related impurity ≤ 0.5% Total impurities:≤ 3%
36.	<b>1. Insulin Lispro</b> <b>2. Insulin Lispro&amp; Insulin Lispro Protamine Suspension (25/75)</b> <b>3. Insulin Lispro&amp; Insulin Lispro Protamine Suspension (50/50)</b>	Related Proteins (RP-HPLC)	NIB/RPL/SOP/49/R2;- 30.9.16 References:IP 2014	A21 Desamido Insulin lispro:NMT 1.5% Total impurities excluding A21 desamido insulin lispro NMT 4%

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37.	1. Insulin Aspart 2. Insulin Aspart & Insulin Aspart Protamine Suspension (30/70) 3. Insulin Aspart & Insulin Aspart Protamine Suspension (50/50)	Related Proteins (RP-HPLC)	NIB/RPL/SOP/51/R2;- 30.9.16 References:IP 2014	B28isoAsp isulinaspart:NMT 2.5% Total area of peaks due to A21Asp insulin aspart, B3Asp insulin aspart & B3 isoAsp insulin aspart:NMT 5% Other peaks corresponding to impurities:NMT 3.5%
38.	Insulin Detemir	Related Proteins (RP-HPLC)	NIB/RPL/SOP/50/R2;- 30.9.16 Reference: Manufacturer's specifications	B3deasamido insulin detemir:≤ 2.3% Insulin detemir related impurities ≤ 2.2%
39.	Insulin Degludec	Related Proteins (RP-HPLC)	NIB/RPL/SOP/85/R0; 03.01.18 Reference: Manufacturer's specifications	Hydrophilic impurities:≤1.2% Hydrophobic related substances:≤3.7% Hydrophobic impurities:≤1.5%
40.	Insulin Degludec/Insulin Aspart	Related Proteins Degludec (RP-HPLC)	NIB/RPL/SOP/85/R0;- 03.01.18 Reference: Manufacturer's specifications	Hydrophilic impurities:≤1.3% Hydrophobic related substances:≤3.0% Hydrophobic impurities:≤1.6%
		Related Proteins Aspart (RP-HPLC)	NIB/RPL/SOP/97/R0;- 28.03.17 Reference: Manufacturer's specifications	B28isoAsp insulin aspart:≤2.2% Desamido insulin aspart:≤4.5% Insulin aspart related

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				impurities:≤1.6% Applicable range of Measurement:0.0-3.5 %
41.	<b>Exenatide</b>	Product Related Impurities (Strong cation exchange-HPLC)	NIB/RPL/SOP/69/R2;- 30.9.16 Reference: Manufacturer's specifications	Total product related impurities NMT 10% Specified product related impurities: [3-39]AC2993:NMT 1.0% [Asu <sup>9</sup> ]AC2993:NMT 1.0% Largest unspecified product related impurities (excluding [double coupled Pro <sup>38</sup> ] AC2993 peak):NMT 3% Applicable range of Measurement:0.0-10.0 %
42.	<b>Exenatide Once Weekly</b>	Purity (Strong Cation Exchange-HPLC)	NIB/RPL/SOP/100/R0;- 28.03.17 Reference: Manufacturer's specifications	Total Product Related Impurities:NMT 10.0% Specific Product Related Impurities: - RRT 0.35 to 0.60:NMT 1.5% - RRT 0.80 to 1.00:NMT 3.0% - RRT 1.00 to 1.20:NMT 1.6% Largest Unspecific Impurity:NMT 0.5% Applicable range of Measurement:0.0-10.0 %
43.	<b>Liraglutide</b>	Related Proteins (RP-HPLC)	NIB/RPL/SOP/84/R0;- 24.01.18 Reference:	Sum of Liraglutide related impurities:≤11.7%

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			Manufacturer's specifications	Other hydrophilic Liraglutide related impurities:≤4.2% Liraglutide related impurities A:≤3.6% Liraglutide related impurities B:≤3.7% Liraglutide related impurities C:≤1.6% Other hydrophobic Liraglutide related impurities:≤2.3% Applicable range of Measurement:0.00-11.7 %
44.	<b>G-CSF</b>	Related Proteins (SDS-PAGE)	NIB/RPL/SOP/47/R3;-. 05.03.18 Reference: IP-2014	Qualitative
		Related Proteins (RP-HPLC)	NIB/RPL/SOP/71/R2;-. 05.02.18 Reference: IP-2014	Each impurity:NMT 2% Total impurity:NMT 3.5%
45.	<b>Interferon β 1a</b>	Related Proteins (RP-HPLC)	NIB/RPL/SOP/74/R0;-. 21.10.16 Reference: Manufacturer's specifications	Minimum 95%
46.	<b>Interferon Alpha-2b</b>	Impurity (SDS-PAGE)	NIB/RPL/SOP/79/R1;-. 22.05.18;References: IP-2014	Qualitative
		Related Proteins	NIB/RPL/SOP/89/R0;-.	Individual impurity:NMT

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		(RP-HPLC)	30.06.16;References: IP-2014	3%, Total impurity:NMT 5% Applicable range of Measurement:0.0-3.0 %
47.	<b>Peg-Filgrastim</b>	Impurity (SDS-PAGE, Non Reducing)	NIB/RPL/SOP/96/R0;- 27.03.17;Reference: Manufacturer's specifications	Qualitative
		Related Proteins (RP-HPLC)	NIB/RPL/SOP/95/R0;- 27.03.17Reference: Manufacturer's specifications	Individual impurity:NMT 3%, Total impurity:NMT 5%
48.	<b>Peg-Interferon Alpha-2b</b>	Purity (SDS-PAGE)	NIB/RPL/SOP/96/R0;- 27.03.17Reference: Manufacturer's specifications	Qualitative
49.	<b>Teriparatide (rh- PTH)</b>	Related Proteins (RP-HPLC)	NIB/RPL/SOP/91/R1;- 02.1.17Reference: Manufacturer's specifications	Individual impurity:NMT 3% Total impurity:NMT5% Applicable range of Measurement:0.0-3.0 %
50.	1. <b>Soluble Insulin</b> 2. <b>Isophane Insulin</b> 3. <b>Biphasic Isophane Insulin (25/75)</b> 4. <b>Biphasic Isophane Insulin (30/70)</b> 5. <b>Biphasic Isophane Insulin</b>	Higher Molecular Weight Proteins (HMWP) (SEC-HPLC)	NIB/RPL/SOP/03/R5;- 24.05.18 NIB/RPL/SOP/46/R2;- 30.9.16 References: IP-2014	Resolution for 4.0 mg/ml of Insulin containing more than 0.4% HMWP Non protamine insulin:NMT 2% Protamine containinginsulin:NMT 3%

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	(50/50) 6. rh-Insulin Bulk			
51.	Insulin Glargine	Higher Molecular Weight Proteins (HMWP) (SEC-HPLC)	NIB/RPL/SOP/43/R4;- 24.05.18 Reference: IP Addendum 2016	Resolution for 4.0 mg/ml of Insulin containing more than 0.4% HMWP <=0.3% & NMT 1.7%
		Higher Molecular Weight Proteins (HMWP) (SEC-HPLC)	NIB/RPL/SOP/103/R0;- 28.03.17 Reference: Reference: Manufacturer's specifications	Resolution for 4.0 mg/ml of Insulin containing more than 0.4% HMWP <=1.5%
52.	1. Insulin Lispro 2. Insulin Lispro& Insulin Lispro Protamine Suspension (25/75) 3. Insulin Lispro& Insulin Lispro Protamine Suspension (50/50)	Higher Molecular Weight Proteins (HMWP) (SEC-HPLC)	NIB/RPL/SOP/03/R5;- 28.03.17 References: IP 2014	Resolution for 4.0 mg/ml of Insulin containing more than 0.4% HMWP NMT 1.5% (for regular) NMT 3.0% (for biphasic)
53.	1. Insulin Aspart 2. Insulin Aspart& Insulin Aspart Protamine Suspension (30/70) 3. Insulin Aspart& Insulin Aspart Protamine	Higher Molecular Weight Proteins (HMWP) (SEC-HPLC)	NIB/RPL/SOP/03/R5;- 28.03.17 References: IP 2014	Resolution for 4.0 mg/ml of Insulin containing more than 0.4% HMWP NMT 2.0% (for regular) NMT 3.0% (for biphasic)



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	<b>Suspension (50/50)</b>			
54.	<b>Insulin Detemir</b>	Higher Molecular Weight Proteins (HMWP) (SEC-HPLC)	NIB/RPL/SOP/03/R5;- 28.03.17 Reference: Reference: Manufacturer's specifications	Resolution for 4.0 mg/ml of Insulin containing more than 0.4% HMWP $\leq 1.1\%$
55.	<b>Insulin Degludec</b>	Higher Molecular Weight Proteins (HMWP) (SEC-HPLC)	NIB/RPL/SOP/83/R0;- 25.01.18 Reference: Reference: Manufacturer's specifications	$\leq 1.0\%$ Applicable range of Measurement: 0.09-4.31 %
56.	<b>Insulin Degludec/Insulin Aspart</b>	Higher Molecular Weight Proteins (HMWP) (SEC-HPLC)	NIB/RPL/SOP/83/R0;- 25.01.18 Reference: Reference: Manufacturer's specifications	$\leq 1.0\%$
57.	<b>Exenatide</b>	Higher Molecular Weight Proteins (HMWP) (SEC-HPLC)	NIB/RPL/SOP/68/R2;- 30.9.16 Reference: Reference: Manufacturer's specifications	0.248 mg/ml NMT 3%
58.	<b>Liraglutide</b>	Higher Molecular Weight Proteins (HMWP) (SEC-HPLC)	NIB/RPL/SOP/81/R0;- 22.12.17 Reference: Reference: Manufacturer's specifications	$\leq 2.7\%$ Applicable range of Measurement: 0.0-0.27 %
59.	<b>rh-Erythropoietin</b>	Higher Molecular Weight Proteins (HMWP) (SEC-HPLC)	NIB/RPL/SOP/66/R0;- 22.12.17 Reference:	NMT 2%

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			IP 2014	
60.	Filgrastim	Higher Molecular Weight impurities (SEC-HPLC)	NIB/RPL/SOP/70/R3;-. 06.03.18 IP-2014	NMT 2%
61.	Interferon Beta-1a	Dimer and related substances of higher molecular mass (SEC-HPLC)	NIB/RPL/SOP/77/R0;-. 28.10.16 Reference: Manufacturer's specifications	≤ 2.0% aggregate Applicable range of Measurement: 0.0-2.5 %
62.	Peg-Filgrastim	Impurity (SEC-HPLC)	NIB/RPL/SOP/94/R0;-. 28.03.17Reference: Manufacturer's specifications	HMWP 1:NMT 2% HMWP 2:NMT 1%
63.	Peg-Interferon Alpha-2b	Purity (SEC-HPLC)	NIB/RPL/SOP/93/R0;-. 28.03.17Reference: Manufacturer's specifications	Di Peg IFN:≤10.0% Mono Peg IFN:≥ 85.0% IFN:≤ 5.0% Other:≤ 1.0%
64.	1. Soluble Insulin 2. Isophane Insulin 3. Biphasic Isophane Insulin (25/75) 4. Biphasic Isophane Insulin (30/70) 5. Biphasic Isophane Insulin (50/50) 6. rh-Insulin Bulk 7. Insulin Glargine	Zinc metal ion estimation (Atomic Absorption Spectrometry)	NIB/RPL/SOP/04/R3;-. 25.04.18 References:IP 2014 IP Addendum 2016-4204-4205	NMT 40 µg/100 IU NMT 1.0% w/w on dried basis 5.89-71.3 µg/ml 23.3-31.5 µg/ml

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	8. Insulin Lispro 9. Insulin Lispro& Insulin Lispro Protamine Suspension (25/75) 10. Insulin Lispro& Insulin Lispro Protamine Suspension (50/50) 11. Insulin Aspart 12. Insulin Aspart& Insulin Aspart Protamine Suspension (30/70) 13. Insulin Aspart& Insulin Aspart Protamine Suspension (50/50) 14. Insulin Detemir 15. Insulin Degludec 16. Insulin Degludec/Insulin Aspart			
65.	Peg Interferon beta 1a	Purity (SEC-HPLC)	NIB/RPL/SOP/77/R0 dt.28.10.16 Reference: Manufacturer's	NMT 4.5 %

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			specifications	
		Purity (Oxidized content)	NIB/RPL/SOP/28/R1dt.24.05.18 Reference: Manufacturer's specifications	NMT 5.5 %
66.	1. Soluble Insulin 2. Isophane Insulin 3. Biphasic Isophane Insulin (25/75) 4. Biphasic Isophane Insulin (30/70) 5. Biphasic Isophane Insulin (50/50) 6. Insulin Glargine 7. Insulin Glulisine 8. Insulin Lispro 9. Insulin Lispro & Insulin Lispro Protamine Suspension (25/75) 10. Insulin Lispro & Insulin Lispro Protamine Suspension (50/50)	Color (Visual Observation)	NIB/RPL/SOP/06/R4;- 26.03.18 References: IP 2014 (Appendix 2.4.1), IP Addendum 2016-	Qualitative

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	11. Insulin Aspart 12. Insulin Aspart & Insulin Aspart Protamine Suspension (30/70) 13. Insulin Aspart & Insulin Aspart Protamine Suspension (50/50) 14. Insulin Detemir 15. Insulin Degludec 16. Insulin Degludec/Insulin Aspart 17. Exenatide 18. Exenatide Once Weekly 19. Liraglutide 20. rh-Erythropoietin 21. Filgrastim 22. Interferon Beta-1a 23. Interferon Alpha-2b 24. Peg-Filgrastim 25. Peg-Interferon Alpha-2b 26. Teriparatide (rh-PTH) 27. Peg Interferon			

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	beta 1a 28. rh-Insulin bulk			
67.	1.Soluble Insulin 2.Isophane Insulin 3.Biphasic Isophane Insulin (25/75) 4.Biphasic Isophane Insulin (30/70) 5.Biphasic Isophane Insulin (50/50) 6.Insulin Glargine 7.Insulin Glulisine 8.Insulin Lispro 9.Insulin Lispro & Insulin Lispro Protamine Suspension (25/75) 10 Insulin Lispro & Insulin Lispro Protamine Suspension (50/50) 11. Insulin Aspart 12. Insulin Aspart & Insulin Aspart Protamine Suspension (30/70) 13. Insulin Aspart & Insulin Aspart Protamine	Clarity (Visual Observation)	NIB/RPL/SOP/06/R4;- 26.03.18, References: IP-2014 (Appendix 2.4.1) IP Addendum 2016-	Qualitative

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	<b>Suspension (50/50)</b> 14. Insulin Detemir 15. Insulin Degludec 16. Insulin Degludec/Insulin Aspart 17. Exenatide 18. Exenatide Once Weekly 19. Liraglutide 20. rh-Erythropoietin 21. Filgrastim 22. Interferon Beta-1a 23. Interferon Alpha-2b 24. Peg-Filgrastim 25. Peg-Interferon Alpha-2b 26. Teriparatide (rh-PTH) 27. Peg Interferon beta 1a 28. rh-Insulin bulk			
68.	1. Soluble Insulin 2. Isophane Insulin 3. Biphasic Isophane Insulin (25/75)	Particulate Matter (Light Obscuration; Microscopy)	NIB/RPL/SOP/11/R3;- 24.05.18 References: IP 2014 (Appendix 2.5.9) IP Addendum 2016-	Qualitative

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	4. Biphasic Isophane Insulin (30/70) 5. Biphasic Isophane Insulin (50/50) 6. Insulin Glargine 7. Insulin Glulisine 8. Insulin Lispro 9. Insulin Lispro& Insulin Lispro Protamine Suspension (25/75) 10. Insulin Lispro& Insulin Lispro Protamine Suspension (50/50) 11. Insulin Aspart 12. Insulin Aspart& Insulin Aspart Protamine Suspension (30/70) 13. Insulin Aspart& Insulin Aspart Protamine Suspension (50/50) 14. Insulin Detemir 15. Insulin			



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	Degludec 16. Insulin Degludec/Insulin Aspart 17. Liraglutide			
69.	1. Soluble Insulin 2. Isophane Insulin 3. Biphasic Isophane Insulin (25/75) 4. Biphasic Isophane Insulin (30/70) 5. Biphasic Isophane Insulin (50/50) 6. Insulin Glargine 7. Insulin Glulisine 8. Insulin Lispro 9. Insulin Lispro & Insulin Lispro Protamine Suspension (25/75) 10. Insulin Lispro & Insulin Lispro Protamine Suspension (50/50) 11. Insulin	pH Determination (Potentiometric)	NIB/RPL/SOP/06/R4;- 26.03.18 References: IP 2014 (Appendix 2.4.24) IP Addendum 2016-	pH 4.0-9.0

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Aspart 12. Insulin Aspart& Insulin Aspart Protamine Suspension (30/70) 13. Insulin Aspart& Insulin Aspart Protamine Suspension (50/50) 14. Insulin Detemir 15. Insulin Degludec 16. Insulin Degludec/Insulin Aspart 17. Exenatide 18. Exenatide once weekly 19. Liraglutide 20. rh- Erythropoietin 21. Filgrastim 22. Interferon Beta- 1a 23. Interferon Alpha-2b 24. Peg-Filgrastim 25. Peg-Interferon Alpha-2b 26. Teriparatide (rh-PTH) 27. Peg Interferon beta 1a			

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70.	Interferon Beta-1a	Protein Concentration (RP-HPLC)	NIB/RPL/SOP/74/R0;-. 21.10.16, References: Reference: Manufacturer's specifications	90-105%
71.	1. Exenatide 2. Filgrastim 3. Interferon Beta-1a 4. Peg-Filgrastim 5. Peg Interferon beta 1a	Osmolality (Osmometry)	NIB/RPL/SOP/36/R0;-. 26.02.18, References: IP 2014 (Appendix 2.4.23), Reference: Manufacturer's specifications	100-1500 mosmol/Kg
72.	rh-Insulin Bulk	Loss on Drying (Gravimetric)	NIB/RPL/SOP/42/R2;-. 30.9.16 References:IP 2014 (2.4.19),	NMT 10.0%
73.	1. Exenatide Once Weekly 2. rh-Erythropoietin 3. Filgrastim 4. Peg-Interferon Alpha-2b	Water Content (Karl Fischer)	NIB/RPL/SOP/63/R2;-. 30.9.16 References: IP 2014 (2.3.43), Reference: Manufacturer's specifications	NMT 1.5%
74.	1. rh-Erythropoietin 2. Filgrastim	Dissolution	NIB/RPL/SOP/25/R0;-. 31.07.17 Reference: Manufacturer's specifications	<300 seconds
75.	1. Insulin Degludec 2. Liraglutide 3. rh-Erythropoietin	Dose accuracy/Volume Tolerance (Gravimetric)	NIB/RPL/SOP/06/R4;-. 26.03.18 References: IP 2014 References:	5%

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	4. Filgrastim 5. Interferon Alpha-2b 6. Peg-Filgrastim 7. Peg-Interferon Alpha-2b 8. Teriparatid e (rh-PTH) 9. Interferon Beta-1a 10. Peg Interferon beta 1a		Reference: Manufacturer's specifications	
76.	<b>Parenteral Preparations:Blood Product</b>			
77.	1. Human Albumin 2. Plasma Protein Fraction 3. Human Normal immunoglobulin IV 4. Human Normal Immunoglobulin IM 5. Anti-D Immunoglobulin IV 6. Anti-D Immunoglobulin IM 7. Tetanus immunoglobulin	Molecular size distribution (HPLC)	NIB/BPL/SOP/11/R2;dt. 24.04.18 NIB/BPL/SOP/23/R3 dt:03.05.18 NIB/BPL/SOP/24/R3 dt:03.05.18 NIB/BPL/SOP/47/R1 Dt:28.04.17 Reference:IP 2014,	80-100%

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	<b>IM</b> <b>8. Rabies Immunoglobulin</b> <b>IM</b> <b>9. Hepatitis Immunoglobulin</b> <b>IM</b> <b>10. Hepatitis Immunoglobulin</b> <b>IV</b> <b>11. Human Immunoglobulin</b> <b>I.V. (Bulk)</b> <b>12. Human Immunoglobulin</b> <b>I.M. (Bulk)</b>			
78.	<b>1. Human Albumin</b> <b>2. Plasma Protein Fraction</b> <b>3. Human Normal immunoglobulin</b> <b>IV</b> <b>4. Human Normal Immunoglobulin</b> <b>IM</b> <b>5. Anti-D Immunoglobulin</b> <b>IV</b> <b>6. Anti-D Immunoglobulin</b> <b>IM</b> <b>7. Tetanus immunoglobulin</b> <b>8. Rabies</b>	Assay for Protein (Kjeldahl method/Biuret method/Clottable protein)	NIB/BPL/SOP/08/R3;dt.23.04.18 NIB/BPL/SOP/22/R3 dt:23.04.18 NIB/BPL/SOP/21/R4 dt:23.04.18 NIB/BPL/SOP/51/R2 dt:18.04.18  NIB/BPL/SOP/07/R2;dt.02.04.18 NIB/BPL/SOP/48/R1 dt:28.04.17  Reference:IP 2014,	Kjeldahl:1-30 % Biuret:1-30 %

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	Immunoglobulin 9. Hepatitis Immunoglobulin IV 10. Hepatitis Immunoglobulin IM 11. Fibrin sealant kit 12. Human Fibrinogen 13. Human Immunoglobulin I.V. (Bulk) 14. Human Immunoglobulin I.M. (Bulk)			
79.	1. Human Albumin 2. Plasma Protein fraction 3. Human Normal Immunoglobulin IV 4. Human Normal Immunoglobulin IM 5. Anti-D Immunoglobulin	Identification (Double Immunodiffusion)	NIB/BPL/SOP/06/R4;dt. 13.01.2017 NIB/BPL/SOP/20/R3;dt.12.01.2017 NIB/BPL/SOP/34/R1;dt. 28.04.2017 Reference:IP 2014	Qualitative

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	IV 6. Anti-D Immunoglobulin IM 7. Tetanus Immunoglobulin 8. Rabies Immunoglobulin 9. Hepatitis Immunoglobulin IM 10. Hepatitis Immunoglobulin IV 11. Human Immunoglobulin I.V. (Bulk) 12. Human Immunoglobulin I.M. (Bulk)			
80.	1. Human Albumin 2. Plasma Protein fraction	Haem content (UV-Vis spectrophotometry)	NIB/BPL/SOP/05/R2;dt.27.04.18 NIB/BPL/SOP/46/R2;dt.23.10.2017 IP 2014,	0.030973-0.045727 OD at 403 nm
81.	1. Human Albumin 2. Plasma Protein Fraction 3. Factor VIII	Assay for sodium by Atomic Absorption Spectrophotometry (AAS)	NIB/BPL/SOP/09/R2;dt.28.03.18 NIB/BPL/SOP/14;dt.29.06.2016 References:IP 2014	30-200mmol/L
82.	1. Human Albumin 2. Plasma Protein Fraction	Assay for Potassium by Atomic Absorption Spectrophotometry (AAS)	NIB/BPL/SOP/10/R2;dt.27.03.18 References:IP 2014	0.05-1.5 mmol/L
83.	1. Human	Protein Composition by	NIB/BPL/SOP/52/R2;dt.	79.8 %-100 %

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	Albumin 2. Plasma Protein Fraction 3. Human Normal Immunoglobulin IV 4. Human Normal immunoglobulin IM 5. Human Immunoglobulin I.V. (Bulk) 6. Human Immunoglobulin I.M. (Bulk) 7. Anti-D Immunoglobulin IV 8. Anti-D Immunoglobulin IM 9. Tetanus immunoglobulin IM 10. Rabies Immunoglobulin IM 11. Hepatitis Immunoglobulin IV 12. Hepatitis Immunoglobulin IM	Zone electrophoresis	04.08.2017 References:IP 2014	

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84.	1. Human Albumin 2. Plasma Protein Fraction 3. Human Normal immunoglobulin IV 4. Human Normal Immunoglobulin IM 5. Anti-D Immunoglobulin IV 6. Anti-D Immunoglobulin IM 7. Human Tetanus immunoglobulin 8. Rabies Immunoglobulin 9. Hepatitis Immunoglobulin 10. Human Immunoglobulin I.V. (Bulk) 11. Human Immunoglobulin I.M. (Bulk)	Test for Purity (SDS-PAGE)	NIB/BPL/SOP/12/R5;dt.28.03.18 NIB/BPL/SOP/49/R2;dt.26.05.17 NIB/BPL/SOP/25/R6;dt.23.03.2017 Reference:IP 2014	Qualitative
85.	1. Human Albumin 2. Plasma Protein Fraction	pH Determination (Potentiometry)	NIB/BPL/SOP/04/R2;dt.24.04.18 NIB/BPL/SOP/45/R2;dt.23.10.2017	pH 1.0-11.0

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	3. Human Normal immunoglobulin IV 4. Human Normal Immunoglobulin IM 5. Anti-D Immunoglobulin IV 6. Anti-D Immunoglobulin IM 7. Tetanus immunoglobulin 8. Rabies Immunoglobulin 9. Hepatitis Immunoglobulin IV 10. Hepatitis B Immunoglobulin IM 11. Human Coagulation factor VIII (plasma derived) 12. Human Coagulation Factor VIII rDNA 13. Human Coagulation Factor IX 14. Anti-Thrombin III concentrate		NIB/BPL/SOP/19/R2;dt.20.04.18 NIB/BPL/SOP/31/R2;dt.20.04.18 NIB/BPL/SOP/35/R3;dt.27.03.2017 Reference: IP 2014.	

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	15. Anti-inhibitor coagulant complex 16. Fibrin sealant kit 17. Human Fibrinogen 18. Human Norma Immunoglobulin I.V. (Bulk) 19. Human Normal Immunoglobulin I.M. (Bulk) 20. Human Tetanus Immunoglobulin (Bulk) 21. Human Prothrombin complex			
86.	1. Human Normal immunoglobulin IV 2. Human Coagulation factor VIII (plasma derived) 3. Human Coagulation Factor VIII rDNA 4. Human Coagulation	Osmolality	NIB/BPL/SOP/27/R5;dt.03.04.18 NIB/BPL/SOP/28/R3;dt.23.03.2017 References:IP 2014	100-1500mOsmol/kg

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	<b>Factor IX</b> <b>5. Anti-Thrombin III concentrate</b> <b>6. Anti-inhibitor coagulant complex</b> <b>7. Human Fibrinogen</b> <b>8. Hepatitis Immunoglobulin IV</b> <b>9. Anti-D Immunoglobulin IV</b>			
87.	<b>1. Human Albumin</b> <b>2. Plasma Protein Fraction</b> <b>3. Human Normal immunoglobulin IV</b> <b>4. Human Normal Immunoglobulin IM</b> <b>5. Anti-D Immunoglobulin</b> <b>6. Tetanus immunoglobulin</b> <b>7. Rabies Immunoglobulin</b> <b>8. Hepatitis Immunoglobulin</b> <b>9. Human Coagulation factor VIII (plasma</b>	Physical Characteristics & solubility	NIB/BPL/SOP/01/R5 dt:17.04.18 NIB/BPL/SOP/30/R3;dt 04.04.18 NIB/BPL/SOP/36/R2;dt. 28.04.2017 Reference:IP 2014	Qualitative

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	derived) 10. Human Coagulation Factor VIII rDNA 11. Human Coagulation Factor IX 12. Anti-Thrombin III concentrate 13. Anti-inhibitor coagulant complex 14. Fibrin sealant kit 15. Human Fibrinogen			
88.	1. Fibrin sealant kit	Stability (Visual Observation)	NIB/BPL/SOP/36/R2;dt. 28.04.2017 Reference IP 2014:3303	Qualitative
89.	1. Human albumin 2. Human Normal Immunoglobulin IV 3. Hepatitis Immunoglobulin IV 4. Anti-D Immunoglobulin IV	Prekallikrein Activator Assay	NIB/BPL/SOP/56/R2 dt. 22.08.2017 NIB/BPL/SOP/26/R2;dt. 27.02.2017 Reference IP 2014:	0.375IU/ml-6IU/ml (Albumin) 0.39IU/ml-6IU/ml (IVIg)
90.	1. Human	Potency by Clotting Assay	NIB/BPL/SOP/53/R1 dt.	80-120% of stated

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Coagulation factor VIII (plasma derived) 2. Human Coagulation Factor VIII Recombinant 3. Human Coagulation Factor IX 4. Human Coagulation Factor IX Complex (Human Prothrombin Complex)		27.07.2017 NIB/BPL/SOP/54/R1;dt. 31.07.2017 Reference IP 2014; Pg. 3298, 3309, 3310.	Potency (Factor VIII plasma derived & Human Prothrombin Complex) 80-125% of stated Potency (Factor VIII Recombinant & Factor IX)(IP 2014)
91	1. Human Coagulation factor VIII (plasma derived) 2. Human Coagulation Factor VIII Recombinant	Potency by Chromogenic Assay	NIB/BPL/SOP/33/R2 dt.09.04.18 Reference IP 2014; .	80-120% of stated Potency (Factor VIII plasma derived) (IP 2014)
92.	1. Human Normal immunoglobulin IV 2. Human Normal Immunoglobulin IM	Antibody to Hepatitis B Surface Antigen	NIB/BPL/SOP/61/R1 dt. 01.08.2017 Reference IP 2014; .	0-150 mIU/ml Minimum 0.5IU per gm of Immunoglobulin(IP 2014)
93.	1. Human Coagulation factor VIII (plasma derived) 2. Human	Residual Moisture by KF Method	NIB/VVL/SOP/006/R2 dt 23.05.2017 Reference IP 2014; And Manufacturer's specifications	≤3% ≤ 2%

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	Coagulation Factor VIII Recombinant 3. Human Coagulation Factor IX 4. Fibrin sealant kit 5. Anti-inhibitor coagulant complex			
<b>B.</b>	<b>Parenteral Preparations: Bacterial Vaccine</b>			
1.	1. Haemophilus influenzae type b TT conjugate vaccine 2. Bacillus Calmette Guerin (BCG) Vaccine	Test for Identity (Immunochemical Assay)  Identification	1. NIB/BVL/SOP/02/R3;- 09.10.17 References:IP 2014;Pg No. 67-69 2. NIB/BVL/SOP/13/R4;- 31.07.17 IP 2014;Pg 3059	Qualitative
2.	1. Haemophilus influenzae type b TT conjugate vaccine	pH Test (Potentiometric Method)	NIB/BVL/SOP/01/R5;- 04.07.17 References:IP 2014 Pg No. 169-170	1-11
3.	1. Haemophilus influenzae type b TT conjugate vaccine	Thiomersol content- Antimicrobial preservative	NIB/BVL/SOP/09/R4;- .09.10.17 References:IP 2014;Pg No. 119	NLT 85% and NMT 115 % of the intended amount
4.	1. Bacillus Calmette Guerin (BCG) vaccine 2. Haemophilus influenzae type b TT conjugate	Test for water content	NIB/BVL/SOP/20/R3;- 31.07.17 Ref IP 2014, Pg No.113-115 & 3059 NIB/VVL/SOP/006/R2;- .23.05.17	Not more than 3%

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	vaccine		NIB/BVL/SOP/06/R1;- .09.10.17 Ref IP 2014 Pg No. 113-115	
5.	1. Haemophilus influenzae type b TT conjugate vaccine	PRP (Ribose Assay)	NIB/BVL/SOP/03/R1;- 02.05.17 Ref IP 2014, Pg No.282-283	80-120%
6.	1. Haemophilus influenzae type b TT conjugate vaccine	Free PRP (Ribose Assay)	NIB/BVL/SOP/05/R1;- 02.05.17 Ref IP 2014, Pg No.282-283	Less than 20%
7.	Oral cholera Vaccine	Identification (Immunochemical Assay)	NIB/BVL/SOP/23/R0;dt. 26.03.18 References:BP 2016;Pg No. 558	Qualitative
		pH Test (Potentiometric Method)	NIB/BVL/SOP/23/R0;dt.26. 03.18 References:BP 2016;Pg No. 558	1-11
		Assay (Antigen content) (Immunochemical Assay)	NIB/BVL/SOP/23/R0;dt. 26.03.18 References:BP 2016;Pg No. 558	Total LPS content not less than 600µg/ml
8.	Oral cholera Vaccine	Free formaldehyde	NIB/BVL/SOP/23/R0;dt. 26.03.18 References:BP 2016;Pg No. 558	Maximum 0.2g/L
9.	1. Live Attenuated Measles Vaccine 2. Live Attenuated Rubella Vaccine	Moisture content	NIB/VVL/SOP/006/R2; dt 23.05.17 Reference:IP 2014, Pg. No:113	NMT 3%

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	3. Live Attenuated MMR Vaccine 4. Cell Culture Rabies Vaccine 5. Live Attenuated Measles & Rubella Vaccine			
10.	1. Cell Culture Rabies Vaccine 2. Hepatitis A Inactivated Vaccine 3. Hepatitis B (r-DNA) Vaccine	Aluminium Content	NIB/BVL/SOP/12/R1; dt-05.07.17 Reference IP 2014, Pg. 95-96, 3136	NMT 1.25mg per single human dose
11.	Rotavirus Vaccine Rotarix Oral Suspension	pH potentiometric	NIB/VVL/SOP/047/R0 dt 06.01.17 Reference IP 2014, Pg. No:3139	6.3 to 8.5
12.	1. Inactivated Polio Vaccine 2. Hepatitis A Inactivated Vaccine 3. Hepatitis B (r-DNA) Vaccine	Free formaldehyde	NIB/BVL/SOP/34/R2 dt. 04.08.17 Reference IP 2014, Pg. No:3126	Maximum 0.2gm/L
13.	1. Hepatitis A Inactivated Vaccine 2. Hepatitis B (r-DNA) Vaccine	Anti-microbial preservative test	NIB/BVL/SOP/09/R4 dt:09.10.17 Reference:Hep A, BP 2017 Pg. IV-593 IP 2014 Pg. 3088 Hep B, BP 2017 PG IV-599	NLT 85% and NMT 115% of the quantity stated on the label

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			IP 2014, Pg 3090	
<b>C.</b>	<b>Parenteral Preparations: Therapeutics Monoclonal Antibody</b>			
1.	1) Rituximab	Identification (SEC-HPLC)	NIB/TMA/SOP/20/R1, dt. 01.08.16 References: Manufacturer's drug product release specifications (Doc.ID:NIB/TMA/Product Specifications/01) & Method of Analysis protocol Method Verification Doc. ID:NIB/TMA/MV/Mab-SEC	a) 0.02mg/ml to 10mg/ml
2.	2) Adalimumab			b) 1.25mg/ml to 50mg/ml
3.	3) Bevacizumab			c) 0.78mg/ml to 25mg/ml
4.	1) Rituximab	Identification (CEX-HPLC)	NIB/TMA/SOP/33/R1, dt. 05.05.17 References: Manufacturer's drug product release specifications (Doc.I D:NIB/TMA/Product Specifications/01) & Method of Analysis protocol Method Verification Doc. ID:NIB/TMA/MV/Rituximab-IEC	a) 0.25mg/ml to 2.0mg/ml
5.	2) Adalimumab	Identification (CEX-HPLC)		b) 0.25mg/ml to 2.0mg/ml
6.	3) Bevacizumab	Identification (CEX-HPLC)		c) 0.125mg/ml to 1.5mg/ml
7.	4) Trastuzumab	Identification (CEX-HPLC)		d) 0.125mg/ml to 1.5mg/ml
8.	Rituximab	Identification (SDS-PAGE)	NIB/TMA/SOP/34/R0, dt. 27.09.16 References: Manufacturer's drug product release specifications (Doc.ID:NIB/TMA/Product Specifications/01) & Method of Analysis protocol	0.2µg/ml
9.	1. Rituximab 2. Bevacizumab	Identification (Capillary Zone)	NIB/TMA/SOP/043/R1, dt. 29.01.18	0.5mg/mL

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	ab 3. Trastuzum ab	Electrophoresis)	References: Manufacturer's drug product release specifications (Doc.ID:NIB/TMA/Product Specifications/01) & Method of Analysis protocol	
10.	1. Rituximab	Purity (SEC-HPLC)	NIB/TMA/SOP/20/R1, dt. 01.08.16 Acceptance criteria at the given concentration range is % Monomer peak area NLT 95%	a) 0.02mg/ml to 10mg/ml
11.	2. Adalimum ab	Purity (SEC-HPLC)	NIB/TMA/SOP/20/R1, dt. 01.08.16 Acceptance criteria at the given concentration range is % Monomer peak area NLT 95%	b) 1.25mg/ml to 50mg/ml
12.	3. Bevacizum ab	Purity (SEC-HPLC)	NIB/TMA/SOP/20/R1, dt. 01.08.16 Acceptance criteria at the given concentration range is % Monomer peak area NLT 92%	c) 0.78mg/ml to 25mg/ml
13.	4. Trastuzum ab	Purity (SEC-HPLC)	NIB/TMA/SOP/20/R1, dt. 01.08.16 Acceptance criteria at the given concentration range is % Monomer peak area NLT 98%	d) 0.625mg/ml to 22mg/ml
14.	1. Rituximab	Purity (CEX-HPLC)	NIB/TMA/SOP/33/R1, dt. 05.05.17 Acceptance criteria at the given concentration range	a) 0.25mg/ml to 2.0mg/ml

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			Relative retention time should be $1 \pm 0.1$	
15.	2. <b>Bevacizumab</b>	Purity (CEX-HPLC)	NIB/TMA/SOP/46/R0, dt. 30.03.17 Acceptance criteria at the given concentration range relative retention time should be $1 \pm 0.1$	b) 0.125mg/ml to 1.5mg/ml
16.	3. <b>Trastuzumab</b>	Purity (CEX-HPLC)	NIB/TMA/SOP/41/R1, dt. 13.06.17 Acceptance criteria at the given concentration range relative retention time should be $1 \pm 0.1$	c) 0.125mg/ml to 1.5mg/ml
17.	<b>Rituximab</b>	Purity (SDS-PAGE-Reducing/Non Reducing)	NIB/TMA/SOP/34/R0, dt. 27.09.16 References: Manufacturer's drug product release specifications (Doc.ID:NIB/TMA/Product Specifications/01) & Method of Analysis protocol	0.2µg/ml
18.	<b>Trastuzumab</b>	Purity (CE-SDS under Reducing & Non-reducing conditions)	NIB/TMA/SOP/16/R2, dt. 23.04.18 References: Manufacturer's drug product release specifications (Doc.ID:NIB/TMA/Product Specifications/01) & Method of Analysis protocol	1mg/ml
19.	1. <b>Rituximab</b> 2. <b>Adalimumab</b> 3. <b>Bevacizumab</b>	Protein Content	NIB/TMA/SOP/06/R1, dt. 23.08.16 References: Manufacturer's drug product	0.5mg/ml

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	ab 4. Trastuzumab ab		releasespecifications (Doc.ID:NIB/TMA/Product Specifications/01) &Method of Analysisprotocol	
	1. Rituximab	pH	NIB/TMA/SOP/03/R1, dt. 05.09.16	1) 6.2-6.8
20.	2. Adalimumab	pH	References: Manufacturer'sdrugproduct	2) 4.7-5.7
21.	3. Bevacizumab	pH	releasespecifications (Doc.ID:NIB/TMA/Product Specifications/01)&Method of Analysisprotocol	3) 5.7-6.7
22.	4. Trastuzumab	pH		4) 5.4-6.6
23.	1. Rituximab	Osmolality	NIB/TMA/SOP/04/R1, dt. 06.09.16	1) 240-400 mOsmol/Kg
24.	2. Adalimumab		References: Manufacturer'sdrugproduct	2) 310-380 mOsmol/Kg
25.	3. Bevacizumab		releasespecifications (Doc.ID:NIB/TMA/Product Specifications/01)	3) 200-350 mOsmol/Kg
26.	4. Trastuzumab		&Method of Analysisprotocol	4) 450-750 mOsmol/Kg
27.	Trastuzumab	Moisture Content	NIB/VVL/SOP/006/R2 dt:23.05.17 Reference: Manufacturer'sdrugproduct releasespecifications	NMT 5.0%
D.	<b>Parenteral Preparations:Enzymes</b>			
1.	1. Streptokinase Bulk/Inj. 2.Recombinant Streptokinase Inj.	Assay/Potency (Chromogenic method)	NIB/EHL/SOP/10/R3; Dt 20.02.18 NIB/EHL/SOP/23/R3; dt.20.02.18 References: IP 2014 addendum 2015	0.5 IU/ml to 4.0 IU/ml Applicable Range of Measurement: 90-111 %

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			Pg No:3931,3932	
2.	1.Streptokinase Bulk/Inj.	Streptodornase activity (UV Vis Spectrophotometry)	NIB/EHL/SOP/07/R4; Dt 02.01.17 References:IP-2014, Pg No. 2794,2795	Qualitative
3.	1. Streptokinase Inj. 2. Recombinant Streptokinase Inj.	Particulate Matter (Visual Observation)	NIB/EHL/SOP/17/R3; Dt. 20.02.18 References: IP 2014, Pg No:956	Qualitative
4.	1. Streptokinase Bulk/Inj. 2. Recombinant Streptokinase Inj.	pH determination (Potentiometry).	NIB/EHL/SOP/06/R3;dt 20.02.18 NIB/EHL/SOP/20/R3;dt 26.10.17 Ref:IP 2014, Pg No:2794. 3380	pH 4.0-9.0
5.	1. Streptokinase inj. 2. Recombinant Streptokinase Inj.	Clarity (Visual Observation)	NIB/EHL/SOP/16/R3; dt 20.02.18 References: IP 2014, Pg No.,957	Qualitative
6.	1. Recombinant Streptokinase Inj.	Residual Moisture Content (Karl Fisher Coulometric method)	NIB/VVL/SOP/006/R2 dt. 23.05.17 Ref:IP 2014, Page:3380	Maximum 3.0%
<b>F.</b>	<b>Hormones</b>			
1.	1. Human Chorionic Gonadotropin Inj. 2. Menotropin (Human Menopausal Gonadotropin) Inj. 3. Urofollitropin (Human follicle stimulating Hormone) Inj.	Particulate Matter by (Visual observation)	NIB/EHL/SOP/49/R1; dt 20.02.18 Ref:IP 2014, Pg. No. 957	Qualitative

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	4. Recombinant Human Follicle Stimulating Hormone Inj. 5. Somatropin Inj. (Recombinant Human Growth Hormone)			
2.	1. Human Chorionic Gonadotropin Inj. 2. Menotropin (Human Menopausal Gonadotropin) Inj. 3. Urofollitropin (Human follicle stimulating Hormone) Inj. 4. Recombinant Human Follicle Stimulating Hormone Inj. 5. Somatropin Inj. (Recombinant Human Growth Hormone)	Clarity (Visual observation)	NIB/EHL/SOP/50/R1;dt.20.02.18 Ref:IP 2014, Pg No.957.	Qualitative
3.	1. Human Chorionic Gonadotropin Inj. 2. Menotropin (Human Menopausal Gonadotropin) Inj.	pH determination	NIB/EHL/SOP/38/R2;dt 20.02.18 NIB/EHL/SOP/42/R2;dt. 26.10.17 Ref:IP 2014, Pg No.:1388	pH.4.0 to 9.0

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	3. Urofollitropin (Human follicle stimulating Hormone) Inj. 4. Recombinant Human Follicle Stimulating Hormone Inj			
4.	Somatropin Inj. (Recombinant Human Growth Hormone)	Identification (SE-HPLC)	NIB/EHL/SOP/56/R1; dt 10.05.18 Ref:IP Addendum 2016, Page no-4320	Qualitative
5.	Somatropin Inj. (Recombinant Human Growth Hormone)	Assay (SE-HPLC)	NIB/EHL/SOP/56/R1; dt 10.05.18 Ref:IP Addendum 2016, Page no.-4320	89.0-105 %
6.	Somatropin Inj. (Recombinant Human Growth Hormone)	Dimer and related substances of higher molecular weight (SE-HPLC)	NIB/EHL/SOP/56/R1; dt 10.05.18 Ref:IP Addendum 2016, Page no.-4320	Maximum 6.0%
7.	Somatropin Inj. (Recombinant Human Growth Hormone)	Residual Moisture Content(Karl Fisher Coulometric method)	NIB/VVL/SOP/006/R2 dt. 23.05.17 EP 2014, Page.2960 IP Addendum 2016, Page no.-4321	Maximum 3.0%
8.	Somatropin Inj. (Recombinant Human Growth Hormone)	Identification (RP-HPLC)	NIB/EHL/SOP/58/R0; dt 16.01.18 Ref:IP Addendum 2016, Page no.-4320	Qualitative
9.	Somatropin Inj. (Recombinant Human Growth Hormone)	Related Protein (RP-HPLC)	NIB/EHL/SOP/58/R0; dt 16.01.18 Ref:IP Addendum 2016,	Maximum 13.0%



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	<b>Hormone)</b>		Page no.-4320	
10.	<b>Heparin Sodium injection</b>	Assay/Potency by Anti factor IIa activity chromogenic method	NIB/EHL/SOP/48/R1;- 26.01.17 Ref:USP 37 pg no: 3406-3407	90-110%
11.	<b>Heparin Sodium injection</b>	Particulate Matter by (Visual observation)	NIB/EHL/SOP/17/R3;dt 20.02.18 Ref:IP 2014, Page 957	Qualitative
12.	<b>Heparin Sodium injection</b>	Clarity (Visual observation)	NIB/EHL/SOP/16/R3; Dt. 20.02.18 Ref:IP 2014, Page 957	Qualitative
		pH determination	NIB/EHL/SOP/51/R2;- 19.06.17 Ref:IP 2014, Page:1888	pH.4.0 to 9.0
		Identification by Method B-Reaction A of sodium Salt	NIB/EHL/SOP/57;dt. 20.03.17 Ref:IP 2014, Page:1888	Qualitative
<b>G.</b>	<b>Blood Grouping Reagents</b>			
1.	<b>1. Anti-A (Monoclonal)</b>	Color (Visual observation)	NIB/BRL/SOP/18/R2,- .22.09.17 Reference:Indian Pharmacopoeia 2014	Qualitative
2.	<b>2. Anti-B (Monoclonal)</b>		NIB/BRL/SOP/19/R2;- 22.09.17 Reference:Indian Pharmacopoeia 2014	Qualitative
3.	<b>3. Anti-A,B (Monoclonal)</b>		NIB/BRL/SOP/20/R2;- 22.09.17 Reference:Indian Pharmacopoeia 2014 and as per manufacturer's specification	Qualitative
4.	<b>4. Anti-D (IgM)</b>		NIB/BRL/SOP/22/R2;-	Qualitative

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	(Monoclonal)		22.09.17 Reference: Indian Pharmacopoeia 2014 and as per manufacturer's specification	
5.	5. Anti-D (IgM + IgG) (Monoclonal)		NIB/BRL/SOP/23/R2;- 22.09.17 Reference: Indian Pharmacopoeia 2014 and as per manufacturer's specification	Qualitative
6.	6. Anti-D (IgG) (Monoclonal)		NIB/BRL/SOP/21/R2;- 22.09.17 Reference: Indian Pharmacopoeia 2014 and as per manufacturer's specification	Qualitative
7.	1. Anti-A (Monoclonal)	Physical Appearance (Visual observation)	NIB/BRL/SOP/18/R2;- 22.09.17 Reference: Indian Pharmacopoeia 2014	Qualitative
8.	2. Anti-B (Monoclonal)		NIB/BRL/SOP/19/R2;- 22.09.17 Reference: Indian Pharmacopoeia 2014	Qualitative
9.	3. Anti-A,B (Monoclonal)		NIB/BRL/SOP/20/R2;- 22.09.17, Reference: Indian Pharmacopoeia 2014 and as per manufacturer's specifications	Qualitative
10.	4. Anti-D (IgM) (Monoclonal)		NIB/BRL/SOP/22/R2;- 22.09.17, Reference: Indian Pharmacopoeia 2014 and as per manufacturer's specifications	Qualitative

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11.	5. Anti-D (IgM +IgG) (Monoclonal)		NIB/BRL/SOP/23/R2;- 22.09.17, Reference:Indian Pharmacopoeia 2014 and as per manufacturer's specifications	Qualitative
12.	6. Anti-D(IgG) (Monoclonal)		NIB/BRL/SOP/21/R2;- 22.09.17, Reference:Indian Pharmacopoeia 2014 and as per manufacturer's specifications	Qualitative
13.	7. Gel card Forward grouping		NIB/BRL/SOP/055/R2;- 22.09.17,Reference:Transfusion Medicine Technical Manual 2003 and as per manufacturer's specifications	Qualitative
14.	8. Anti-Fy <sup>a</sup> reagent	Physical Appearance (Visual observation)	NIB/BRL/SOP/066/00;- 22.09.17 Reference:Indian Pharmacopoeia 2014	Qualitative
15.	9. Anti-Jk <sup>a</sup> reagent		NIB/BRL/SOP/066/00;- 22.09.17 Reference:Indian Pharmacopoeia 2014	Qualitative
16.	10. Anti-K reagent		NIB/BRL/SOP/066/00;- 22.09.17 Reference:Indian Pharmacopoeia 2014	Qualitative
17.	11.Anti-k reagent		NIB/BRL/SOP/066/00;- 22.09.17 Reference:Indian Pharmacopoeia 2014	Qualitative
18.	12. Anti-Le <sup>a</sup> reagent		NIB/BRL/SOP/066/00;- 22.09.17 Reference:Indian	Qualitative

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19.	13. Anti-Le <sup>b</sup> reagent		Pharmacopoeia 2014 NIB/BRL/SOP/066/00;-. 22.09.17 Reference:Indian Pharmacopoeia 2014	Qualitative
20.	14. Anti-Pi reagent		NIB/BRL/SOP/066/00;-. 22.09.17 Reference:Indian Pharmacopoeia 2014	Qualitative
21.	15. Anti-M reagent		NIB/BRL/SOP/066/00;-. 22.09.17 Reference:Indian Pharmacopoeia 2014	Qualitative
22.	16. Anti-N reagent		NIB/BRL/SOP/066/00;-. 22.09.17 Reference:Indian Pharmacopoeia 2014	Qualitative
23.	17. Anti-S reagent		NIB/BRL/SOP/066/00;-. 22.09.17 Reference:Indian Pharmacopoeia 2014	Qualitative
24.	1. Anti-A <sub>1</sub> (Lectin)	Clarity (Visual observation)	NIB/BRL/SOP/24/ R2,22.09.17, References:Based on NIB data and recommendation of experts	Qualitative
25.	2. Anti-H (Lectin)		NIB/BRL/SOP/25/R1;-. 22.09.17, References:Based on NIB data and recommendation of experts	Qualitative