

NHS Greater Glasgow & Clyde
Management of Non-Cytotoxic Intrathecal & Intraventricular Injections (NCIIs)
NHSGGC Register of Authorised Specialties/Clinical Areas, NCIIs, Dose Ranges and Upper Limits



As recommended by the Scottish Government HDL(2006)11, Guidance for the Safe Handling of Intrathecal and Intraventricular Injections, NHS Greater Glasgow & Clyde (NHSGGC) have developed a local policy which outlines all relevant governance arrangements. This policy was approved by the NHSGGC Area Drug and Therapeutics Committee (ADTC) in February 2009, and updated July 2014.

The relevant documents are attached below and are available on all clinical areas authorised to use these agents, the anaesthetics website and the Clinical Governance website.

Scottish Government HDL(2006)11 Guidance for the Safe Handling of Intrathecal and Intraventricular Injections

http://www.sehd.scot.nhs.uk/mels/HDL2006_11.pdf

NHSGGC Organisational Policy for the Management of Non-Cytotoxic Intrathecal and Intraventricular Injections

(http://www.ggcmedicines.org.uk/media/uploads/policies/section_11/intrathecal_non-chemo_policy_-_2014.pdf)

The following pages record the specialties/clinical areas, NCIIs, dose ranges and upper limits which are authorised for use within NHSGGC. This information is not transferable to other clinical areas and no other medicines can be used via the intrathecal or intraventricular route if not recorded in this register. If you would like to use a particular medicine via the intrathecal or intraventricular route which is not on this list, you must submit a request in writing in advance of use, with supporting evidence and with an Unlicensed Medicines Request form (where appropriate) to the Designated Lead for the specialty/clinical area and the Leads for Implementation (below). The Designated Lead should consult with nominated pharmacy and nursing leads before making a decision on whether to approve/not approve the request. This decision will be formally authorised by the appropriate Clinical Director, who retains overall responsibility. Refer to section 3.7.1 of the policy for further details. This application must be copied to Dr Philip Oates or Catherine McLaughlin, or deputies (contact details below).

For further information or advice, please contact:

Leads for Implementation:

Dr Philip Oates

Consultant Anaesthetist and

Chair of the Multidisciplinary Working Group for NHS HDL (2006) 11

Base: Anaesthetics Department, QEJH

Tel: 0141 452 3430; Email: philip.oates@ggc.scot.nhs.uk

Deputies:

Dr Lars Williams, Consultant in Anaesthesia and Pain Management

Base: Pain Management Service, NVH,

Tel: 0141 347 8005; Email: Lars.Williams@ggc.scot.nhs.uk

Dr Alison Mitchell, Consultant in Palliative Medicine

Base: Beatson West of Scotland Cancer Centre

Tel: 0141 301 7042; Email: Alison.Mitchell3@ggc.scot.nhs.uk

Catherine McLaughlin

Lead Pharmacist, Medicines Governance

Base: Pharmacy Department, Glasgow Royal Infirmary

Tel: 0141 211 5816; Email: catherine.mclaughlin@ggc.scot.nhs.uk

Alister MacLaren, Lead Pharmacist Clinical Governance, NHSGGC

Base: PPSU, WGACH

Tel 0141 232 1745; Email: alister.maclaren@ggc.scot.nhs.uk

Lorna Rankine, Risk Management Pharmacist, NHSGGC

Base: Pharmacy Department, Glasgow Royal Infirmary

Tel: 0141 211 0530; Email: lorna.rankine@ggc.scot.nhs.uk

NHSGGC Specialties/Clinical Areas Authorised to Use NCIII

Sectors / Specialties	Specialty/Clinical Area	Comments	Page
Surgery and Anaesthetics (All Sectors)	Theatres, Anaesthetic Rooms and Operating Departments	For obstetric, gynaecology and paediatric theatres, see under Women and Childrens' Directorate	3 – 4
	ENT		5
	Chronic Pain Service		6
Women and Children's	Obstetrics and Gynaecology		7 – 8
	Paediatrics and Neonates		9 – 10
Regional Services	Palliative Care Intrathecal Service		11
	Spinal Injuries, Neurosciences & Neuroradiology		12 – 14
	Physically Disabled Rehabilitation Unit		16
	WAVE Study	Spans Old Age Psychiatry and Spinal Injuries, Neurosciences & Neuroradiology – see under Mental Health	
Mental Health	Old Age Psychiatry	Spans Old Age Psychiatry and Spinal Injuries, Neurosciences & Neuroradiology (as administered by neuroanaesthetists), Older People Mental Health and Glasgow and Clyde Community Services	17
Pharmacy Prescribing and Support Unit (PPSU)	Aseptic Services		18
	Pharmacy Distribution Centre		18
	Site Based Pharmacy Departments	See Under Relevant Specialty/Clinical Area	

**NHSGGC Surgery & Anaesthetics:
 Authorised NCIII List for Theatres, Anaesthetic Rooms and Operating Departments***

NCIII Approved for Use	Licensed Status: Licensed Medicine / Off-Label / Unlicensed Medicine	Aseptic Manipulation / Preparation Required	Storage in Clinical Area Authorised	Approved Dose Range	Upper Limit
Intrathecal Bupivacaine 0.25%	Off-label	No – agent used via other routes therefore not subject to NCIII controls within and on leaving pharmacy	Yes	10-15mg	20mg
Intrathecal Bupivacaine 0.5% (Plain or Heavy)	Plain: Off-label Heavy: Licensed medicine	As above**	Yes	10-20mg	25mg
Intrathecal Diamorphine	Off-label	As above	Yes	Up to 400micrograms	400micrograms, rarely up to 800micrograms in major surgery
Intrathecal Fentanyl	Off-label	As above	Yes	15-25 micrograms	30 micrograms
Intrathecal Levobupivacaine 2.5mg/ml	Licensed medicine (doses above 15mg are off-label)	As above	Yes	10-20mg	25mg
Intrathecal Levobupivacaine 5mg/ml	Licensed medicine (doses above 15mg are off-label)	As above	Yes	10-20mg	25mg
Intrathecal Morphine PF	Licensed medicine but unlicensed route	As above	Yes	Up to 400micrograms	400micrograms, rarely up to 1mg in major surgery
Intrathecal Prilocaine 2% (Hyperbaric)	Licensed medicine for spinal anaesthesia	As above	Yes	40-80mg	80mg

* On very rare occasions, this may also include administration in critical care areas.

** Heavy bupivacaine exclusively used via intrathecal route (confirmed by Dr Phil Oates and Ruth Forrest). Consider implementation of NCIII controls.

Continued/

Site-Based Leads, Contacts and Local Information

Site	Designated Lead	Nominated Pharmacy Lead	On-Site Pharmacy Contact(s)	Nominated Nursing Lead	Information Folder Location	Location of Intralipid 20% for Local Anaesthetic Toxicity
VI ACH	Dr Alan Gillespie	Ruth Forrest, Lead Clinical Pharmacist ITU & Theatres	Elaine Wilson Mary Leishman Scott Nicol	Juliet Sullivan	Theatres (1) Pharmacy (1) ACH Th (1) - Stored electronically via Shared Drive ACH Pharm (1)	Theatres Arrest Trolleys
QEUH Theatres	Dr Phil Oates	Ruth Forrest	Joanne Barton	Julie Garnett May Hodgson	Theatres (1) Pharmacy (1)	Arrest trolleys, ITU, theatres & HDU
GGH Theatres	Dr Malcolm Watson	Ruth Forrest	Gayle Rothnie Erin Flynn Angela McCafferty	Alison Deas	Theatres (1) Pharmacy (1)	Theatres Arrest Trolleys
GRI Theatres	Dr Geraldine Gallagher	Ruth Forrest	Rakesh Kishore Pamela MacTavish Morna Ball Nicola Cairns Angela McCafferty	Sr Carole Morley and/or Juliet Sullivan	Theatres (1) Pharmacy (1)	Theatres
Stobhill ACH Theatres	Dr Barry Evans	Ruth Forrest	As for GRI Theatres	Juliet Sullivan	Stored electronically via Shared Drive	Emergency Trolley Drawer labelled 'Local Anaesthetic Toxicity'. Theatres, End of Theatre Corridor (beside tea room).
RAH Theatres	Dr Liz James	Ruth Forrest	Fiona MacGregor Jonathan Yates Annmarie Crowe		Theatres (1) Pharmacy Medicines Information (1)	Inpatient Theatres and HDU
IRH Theatres	Dr Duncan Thomson	Ruth Forrest	Joanne Berrich Aileen Begley		Theatres (1) Pharmacy Dispensary (1)	Theatres and ICU
VoL Theatres	Dr Liz James	Ruth Forrest	To be confirmed		Theatres (1) Pharmacy Medicines Information (1)	Theatres

Authorised NCIII List for ENT Theatre:

Department	Designated Lead	Nominated Pharmacy Lead(s)	Designated Contacts within On-Site Pharmacy Department	Nominated Nursing Lead(s)	NCIIIs Approved for Use	Indication	Licensed Status LM / ULM / LM but unlicensed indication	Aseptic Manipulation /Preparation Required	Storage in Clinical Area Authorised	Approved Dose Range	Upper Limit	Folder/ Information Storage Location	Location of Intralipid for Potential LA Toxicity
ENT Theatre	Dr McGarry ENT Dr Colin Runcie, Consultant Anaesthetist (Only used by above consultants)	Ruth Forrest Lead Clinical Pharmacist ITU & Theatres Helen Lindsay & Douglas Malcolmson, Lead Clinical Pharmacists ENT, Ophthalmology, Orthopaedics	Ruth Forrest Carlene Burleigh, Helen Lindsay, Douglas Malcolmson, Joanne Barton		Intrathecal fluorescein 5%	Imaging CSF leaks	Unlicensed medicine	Yes, made in pharmacy at PPU WIG and ordered on named-patient basis on agreed request form.	No	0.5ml	0.5ml	ENT Theatres	N/A

Authorised NCIII List for Chronic Pain Service:

Department	Designated Lead	Nominated Pharmacy Lead(s)	Designated Contacts within On-Site Pharmacy Department	Nominated Nursing Lead(s)	NCIIIs Approved for Use	Indication	Licensed Status LM / ULM / LM but unlicensed indication	Aseptic Manipulation /Preparation Required	Storage in Clinical Area Authorised	Approved Dose Range	Upper Limit	Folder/ Information Storage Location	Location of Intralipid for Potential LA Toxicity	
Different combinations of the agents below may be used, depending on patient needs. These combinations will be unlicensed, under strict control of, and prescribed only by Dr Lars Williams.														
CPS VI ACH	Dr Lars Williams, Consultant in Anaesthetics & Pain Management, Pain Management Service, NHSGGC, Base: NVH 0141 347 8005	Ruth Forrest Lead Clinical Pharmacist ITU & Theatres	WIG PPU Link: Graham Conkie / Kay Pollock VI ACH Links: Isabelle O'Hara / Mary Leishman / Scott Nicol Stobhill ACH Links: Nicola Cairns / Angela McCafferty Inverclyde Links: Joanne Berrich / Aileen Begley			Intrathecal bupivacaine	Intractable pain which cannot be managed by other traditional and existing means of pain relief	Licensed medicine	Yes, made in pharmacy at PPU WIG and ordered on named-patient basis on agreed request form.	No	Up to 30mg	30mg/ 24 hours**	Chronic Pain Department ACH VI (1)	Theatres & Day Surgery Unit VI
CPS Stobhill ACH				Intrathecal clonidine		As above	Licensed medicine but unlicensed route	As above	As above	2-8 micrograms/kg/hour	Max daily dose: 1mg Max conc: 2mg/ml	Chronic Pain Department ACH Stobhill (1)	Theatres Inverclyde	
CPS Inverclyde				Intrathecal diamorphine		As above	Licensed medicine but unlicensed route	As above	As above	5-10mg/day	5-10mg/ 24hours**			
				Intrathecal fentanyl		As above	Licensed medicine but unlicensed route	As above	As above	Up to 100micrograms/day	Max conc: 2mg/ml Up to 100micrograms/day			
				Intrathecal hydro-morphone		As above	Unlicensed medicine	As above	As above	Up to 20mg/day	Max conc: 35mg/ml** Up to 20mg/day			
				Intrathecal levo-bupivacaine		As above	Licensed medicine	As above	As above	Up to 30mg/day	Max conc: 40mg/ml** Up to 30mg/day			
				Intrathecal morphine PF		As above	Licensed medicine but unlicensed route	As above	As above	Up to 30mg/day	Max conc: 50mg/ml** Up to 30mg/day			
							Intrathecal phenol 5% in glycerol	Removed 28.08.2014						

** In exceptional circumstances, it may be necessary to use a higher daily dose or concentration. These doses must be verified by Dr Lars Williams.

**NHSGGC Women & Childrens' Directorate:
 Authorised NCIII List for Obstetrics and Gynaecology:**

Department	Designated Lead	Nominated Pharmacy Lead(s)	Designated Contacts within On-Site Pharmacy Department	Nominated Nursing Lead(s)	NCIIIs Approved for Use	Indication	Licensed Status LM / ULM / LM but unlicensed indication	Aseptic Manipulation /Preparation Required	Storage in Clinical Area Authorised	Approved Dose Range	Upper Limit	Folder/ Information Storage Location	Location of Intralipid for Potential LA Toxicity
QEUH Maternity Theatres	Dr Regina O'Connor Ext 61659/8	June Grant, Lead Clinical Pharmacist Obstetrics and Gynaecology / Peter Mulholland, Neonatal Pharmacist SGUH	Peter Mulholland & Joanne Barton	May Hodgson Anaesthetic Sister	Intrathecal diamorphine 0.4mg and bupivacaine 0.5% 1.5ml to 2.2ml (heavy)	To provide anaesthesia for operative deliveries	Unlicensed medicine	No – agent used via other routes therefore not subject to NCIII controls within and on leaving pharmacy	Yes	1.9ml – 2.6ml of solution	2.6ml, rarely up to 2.9ml of solution	Obstetric Anaesthetic Office (1)	Resus Trolley, Gyn 2 Theatre. From January 2010: Obstetric Resus Trolley
PRM Obstetric Anaesthetics	Dr Fiona Bryden for Obstetric Anaesthetics 01412114620 (on anaesthetists register)	June Grant, Lead Clinical Pharmacist Obstetrics and Gynaecology	As above		Intrathecal bupivacaine 0.5% Heavy 1.5ml to 3ml diamorphine 300micrograms.	To provide anaesthesia for operative deliveries	Licensed Mixtures with diamorphine off label	No, also used via other routes therefore not subject to NCIII contols within and on leaving pharmacy.	Yes	At the discretion of the anaesthetist but dose above 3.3ml used rarely.	Doses above 3.3ml used rarely	Consultant Anaesthetist Room, Theatre Lobby, Labour Ward (1)	Theatres and emergency trolley in HDU Level 3 PRM
					Intrathecal levo-bupivacaine 0.25% and 0.5%	Generally for analgesia for labour and occasionally used for anaesthesia	Licensed	As above	Yes	2.5mg-15mg	15mg	As above	Theatres and emergency trolley in HDU, level 3 PRM
GRI Gynaecology	Dr Rosie Snaith, Consultant Anaesthetist Gynaecology	June Grant, Lead Clinical Pharmacist Obstetrics and Gynaecology	As above	Carole Morley	As under PRM Obstetric Anaesthetics for intrathecal bupivacaine and intrathecal levo-bupivacaine	To provide anaesthesia for gynaecological procedures	Licensed	No, also used via other routes therefore not subject to NCIII contols within and on leaving pharmacy.	Yes	2.5mg-15mg	15mg	Consultant Anaesthetist Room, Theatre Lobby, Labour Ward (1)	Theatre 4 Level 2 PRM
					Intrathecal diamorphine	As above	Licensed medicine but unlicensed route	As above	Yes	Up to 300micrograms	300micrograms		
					Intrathecal morphine PF	As above	Licensed medicine but unlicensed route	As above	Yes	100 – 300 micrograms	300micrograms		

Authorised NCIII List for Obstetrics and Gynaecology (continued):

Department	Designated Lead	Nominated Pharmacy Lead(s)	Designated Contacts within On-Site Pharmacy Department	Nominated Nursing Lead(s)	NCIII Approved for Use	Indication	Licensed Status LM / ULM / LM but unlicensed indication	Aseptic Manipulation /Preparation Required	Storage in Clinical Area Authorised	Approved Dose Range	Upper Limit	Folder/ Information Storage Location	Location of Intralipid for Potential LA Toxicity
RAH Maternity	Liz James, Consultant Anaesthetist and Lead Anaesthetist Clyde (based at RAH) 0141 314 6609	June Grant, Lead Clinical Pharmacist Obstetrics and Gynaecology / Maria Tracey	Maria Tracey / Annmarie Crowe		Intrathecal bupivacaine 0.25%	To provide anaesthesia for operative deliveries	Licensed medicine but unlicensed route	No – agent used via other routes therefore not subject to NCIII controls within and on leaving pharmacy	Yes	10-15mg	20mg	Theatres (1)	Maternity Theatre
					Intrathecal bupivacaine 0.5% (plain or hyperbaric)	As above	Plain: Licensed medicine but unlicensed route Heavy: Licensed medicine	As above	Yes	10-15mg	20mg		
					Intrathecal diamorphine 5mg ampoule reconstituted to 1mg/ml	As above	Licensed medicine but unlicensed route	As above	Yes	200-300 micrograms	400 micrograms		
					Intrathecal fentanyl 50microgram/ml	As above	Licensed medicine but unlicensed route	As above	Yes	15-25 micrograms	25 micrograms		
					Intrathecal levo-bupivacaine 2.5mg/ml	As above	Licensed medicine	As above	Yes	10-15mg	20mg		
					Intrathecal levo-bupivacaine 5mg/ml	As above	Licensed medicine	As above	Yes	10-15mg	20mg		
					Intrathecal morphine PF	As above	Licensed medicine but unlicensed route	As above	Yes	Up to 200micrograms	200 micrograms		
					Intrathecal bupivacaine 0.5% heavy with 400microgram diamorphine	As above	Off label	As above	yes	1.9-2.6ml solution	2.6 ml rarely up to 2.9ml		

**NHSGGC Women & Children's Directorate:
 Authorised NCIII List for Paediatrics & Neonates (RHC):**

Department	Designated Lead	Nominated Pharmacy Lead(s)	Designated Contacts within On-Site Pharmacy Department	Nominated Nursing Lead(s)	NCIIIs Approved for Use	Indication	Licensed Status LM / ULM / LM but unlicensed indication	Aseptic Manipulation /Preparation Required	Storage in Clinical Area Authorised	Approved Dose Range	Upper Limit	Folder/ Information Storage Location	Location of Intralipid for Potential LA Toxicity
Paediatric Theatres (Anaesthetics)	Dr Pam Cupples / Dr Graham Bell Tel: 201 0186	Steve Bowhay Lead Clinical Pharmacist Paediatrics and Neonates	Steve Bowhay		Intrathecal levo-bupivacaine ampoules 0.25% and 0.5%	Spinal anaesthesia	Licensed medicine	No. Also used via other routes therefore not subject to NCIII controls within and on leaving pharmacy.	Yes	Up to 1.5mg/kg	Extremely unlikely to exceed 15mg total		Th recovery resus. trolley
					Levo-bupivacaine and clonidine	Spinal anaesthesia	Unlicensed medicine		Yes	Up to 1.5mg/kg for levo-bupivacaine Up to 1microgram/kg for clonidine (always with levo-bupivacaine)	Up to 15mg of levo-bupivacaine Up to 1microgram/kg clonidine (always with levo-bupivacaine)		
Fraser of Allander Neurology Unit – Neurology & FANU Intrathecal Baclofen Service	Dr Valerie Orr Consultant in Paediatric Neuro-disability (Dr Tong Hong Yeo Consultant Paediatric Neurologist – on leave over 2017)	As above	As above		Intrathecal baclofen	Spasticity	Licensed medicine	Yes, made in Yorkhill Pharmacy	No	Up to 100 micrograms	100 micrograms. Higher doses may rarely be required in severe brain injury which must be approved by a consultant neurologist.	Dr Valerie Orr's Office (1) Pharmacy (1)	N/A
					Application approved by Dr Valerie Orr, 01.06.17 for Dr Nick Heaney to prescribe and administer.	Intrathecal nusinersen	Compassionate use in Spinal Muscular Atrophy Type 1	ULM Compassionate use	Yes	No	9.6mg - 12mg	12mg	

**NHSGGC Women & Children's Directorate:
 Authorised NCIII List for Paediatrics & Neonates (RHC): (continued)**

Department	Designated Lead	Nominated Pharmacy Lead(s)	Designated Contacts within On-Site Pharmacy Department	Nominated Nursing Lead(s)	NCIIIs Approved for Use	Indication	Licensed Status LM / ULM / LM but unlicensed indication	Aseptic Manipulation /Preparation Required	Storage in Clinical Area Authorised	Approved Dose Range	Upper Limit	Folder/ Information Storage Location	Location of Intralipid for Potential LA Toxicity
Fraser of Allander Neurology Unit – Neuro-surgery	Miss Patricia Littlechild, Consultant Neuro-surgeon, INS, QEUH Deputy: Dr Roddy O’Kane, Consultant Neuro-surgeon, INS, QEUH	Steve Bowhay Lead Clinical Pharmacist Paediatrics and Neonates	Steve Bowhay Lead Clinical Pharmacist Paediatrics and Neonates		All agents as described for adult patients - refer to Neurosciences information on page 13 and 14.								N/A
Pain Team	Dr Tony Moores Deputy: N/A	Steve Bowhay Lead Clinical Pharmacist Paediatrics and Neonates	Steve Bowhay Lead Clinical Pharmacist Paediatrics and Neonates		Intrathecal baclofen	Spasticity	Licensed medicine	Yes, made in RHC Pharmacy	No	As above	As above		
PRM Neonates	Dr Andrew Powls, Neonates, Tel 2115210	Steve Bowhay, Lead Clinical Pharmacist Paediatrics & Neonates	June Grant		No agents authorised - patient would be referred to Neonatal Surgical Unit at RHC to receive.	Under guidance of specialists at RHC							

NHSGGC Regional Sector:

Authorised NCIII List for Palliative Care Intrathecal Service:

Department	Designated Lead	Nominated Pharmacy Lead(s)	Designated Contacts within On-Site Pharmacy Department	Nominated Nursing Lead(s)	NCIIIs Approved for Use	Indication	Licensed Status LM / ULM / LM but unlicensed indication	Aseptic Manipulation /Preparation Required	Storage in Clinical Area Authorised	Approved Dose Range	Upper Limit**	Folder/ Information Storage Location	Location of Intralipid for Potential LA Toxicity
NHSGGC	Dr Alison Mitchell Consultant in Palliative Medicine, West of Scotland Cancer Centre Tel 301 7042 Deputy: Claire O'Neill Nurse Consultant Interventional Cancer Pain Service Tel 301 7042	Elayne Harris, Area Pharmacy Specialist Palliative Care, NHSGGC Tel 427 8248/ Joe Harrison, Palliative Care Pharmacist, Office Suite 2A, West of Scotland Cancer Centre Tel 301 7044	Elayne Harris/ Joe Harrison/ Isabelle O'Hara/ Carla Forte	Claire O'Neill Nurse Consultant Interventional Cancer Pain Service Tel 301 7042	Intrathecal bupivacaine	Intractable cancer related pain	Licensed medicine	Yes – prepared in WoSCC	Only by prior arrangement, on an individual patient basis and for logistical reasons only at weekends and out-of-hours.	Up to 50mg/day	50mg/day** (rarely up to 120mg/day)	WoSCC: Palliative Care Office, master (1) Ward B2 (1) OPD (1) WIG/GGH Palliative Care CNS Office (1) St Margarets (1) Pharmacy (1) North East : Huntershill (1) GRI Palliative Care Office (1) Stobhill Palliative Care Office (1) South: PPOW (1) VI Palliative Care Office (1) South Palliative Care Office (1) Pharmacy PPU, WIG	GGH Theatres and HDU
					Intrathecal bupivacaine concentrated 30mg/ml (or 40mg/ml if supply problems)	As above	Unlicensed formulations: imported via IDIS on named patient basis.	As above	As above	Up to 50mg/day	50mg/day** (rarely up to 120mg/day)		
					Intrathecal clonidine	As above	Licensed medicine but unlicensed route	As above	As above	2-8 micrograms/kg/hour	1mg/day		
					Intrathecal clonidine concentrated 2mg/ml	As above	Unlicensed (ULM Ref 201231)	As above	As above	2-8 micrograms/kg/hour	1mg/day		
					Intrathecal diamorphine	As above	Licensed medicine but unlicensed route	As above	As above	5-10mg/day	5-10mg/day		
					Intrathecal fentanyl	As above	Licensed medicine but unlicensed route	As above	As above	Up to 5mg/day Max conc: 2mg/ml	5mg/day		
					Intrathecal hydro-morphone	As above	Unlicensed medicine	As above	As above	Up to 20mg/day Max conc: 30mg/ml**	20mg/day		
					Intrathecal ketamine	As above	Licensed medicine but unlicensed route	As above	As above	0.025-1mg Max conc: 2mg/ml	1mg/day		
					Intrathecal levo-bupivacaine	As above	Licensed medicine	As above	As above	Up to 50mg/day	50mg/day** (rarely up to 120mg/day)		
					Intrathecal morphine PF	As above	Licensed medicine but unlicensed route	As above	As above	Up to 30mg/day Max conc 50mg/ml**	Up to 30mg**		
					Intrathecal mldazolam	As above	Licensed medicine but unlicensed route	As above	As above	0.025-1mg Max conc: 2mg/ml	1mg/day		
					Intrathecal ropivacaine 7.5mg/ml 10mg/ml	As above	Licensed medicine	As above	As above	Up to 50mg/day	50mg/day** (rarely up to 60mg/day)		
					Intrathecal ziconotide	As above	Licensed medicine	As above	As above	2.4-9.6 micrograms	21.6micro-grams/day		

** In exceptional circumstances, it may be necessary to use a higher daily dose or concentration. These doses must be verified by a clinician level 1 and the leads for implementation should be informed.

**NHSGGC Regional Sector:
Authorised NCIII List for Spinal Injuries:**

Department	Designated Lead	Nominated Pharmacy Lead(s)	Designated Contacts within On-Site Pharmacy Department	Nominated Nursing Lead(s)	NCIIIs Approved for Use	Indication	Licensed Status LM / ULM / LM but unlicensed indication	Aseptic Manipulation /Preparation Required	Storage in Clinical Area Authorised	Approved Dose Range	Upper Limit	Folder/ Information Storage Location	Location of Intralipid for Potential LA Toxicity
Philipshill	Dr Alan McLean, Consultant in Spinal Injuries, SGUH Ext 62545	Lesley Murray	Lesley Murray / Joanne Gallagher	Sr Karen McCarron Ext 62563 Senior S/N Laura MacLean	Intrathecal phenol 5%	Intractable spasticity	Unlicensed medicine	No, due to instability, it must be prepared and administered immediately prior to use.	No, must be ordered on a named patient basis and issued to the administrator immediately prior to use. Supplied via NVH Pharmacy to RHC Aseptic Unit immediately prior to use.	Up to 5ml of phenol 5% in glycerol (2 injections in total, 1 injection for each side of the body)	5ml of 5% phenol in glycerol for left side of body and 5ml of 5% phenol in glycerol for right side of the body	Spinal Injuries Outpatient Department Office	SGUH Maternity Theatres
					See under Outpatients Department. All agents ordered, stocked, supplied to OPD to Sr McCarron or S/N McLean who will either administer the agents or one of the registered doctors.	See under Outpatients Department.	See under Outpatients Department.	See under Outpatients Department.	PF Morphine 40mg/ml 1 box	See under Outpatients Department.	See under Outpatients Department.		
Edenhall	As above	As above	As above	As above		See under Outpatients Department.	See under Outpatients Department.	See under Outpatients Department.	No	See under Outpatients Department.	See under Outpatients Department.	Spinal Injuries Outpatient Department Office	SGUH Maternity Theatres
Outpatients Department	As above	As above	As above	As above	Intrathecal baclofen 50, 500, 2000micro-grams/ml	Spasticity	Licensed medicine	Yes for some strengths. Ordered on prescription on a named patient basis. All products subject to NCIII controls.	Small stocks (quantity) authorised for logistical reasons: baclofen 50, 500, 1000, 2000, 3000micro-grams/ml	Not applicable.	1000micro-grams/day. Occasionally higher doses may be necessary and prescriptions must be checked by 2 consultants.	Spinal Injuries Outpatient Department Office (1)	SGUH Maternity Theatres
					Intrathecal baclofen 100, 200, 300, 400, 1000, 3000micro-grams/ml	Spasticity	Unlicensed medicine						
					Intrathecal levo-bupivacaine 7.5mg/ml	Chronic pain	Licensed medicine 10ml vials, draw up 6 x 10ml into pump (1 pt)	Not currently but explore the potential to make in pharmacy.	1 box, use 12 per month but explore potential to make in pharmacy	Patient currently gets 30mg/day	No definite upper limit. All intrathecal bupivacaine prescriptions must be checked by 2 consultants.		
					Intrathecal morphine PF 40mg/ml	Chronic pain	Unlicensed medicine 18ml pump (1 pt)	Not currently but explore the potential to make in pharmacy.	1 box in Philipshill but explore potential to make in pharmacy	Patient currently gets 12.75mg/day	No definite upper limit. All intrathecal morphine prescriptions must be checked by 2 consultants.		

**NHSGGC Regional Sector:
Authorised NCIII List for Neurosciences:**

Department	Designated Lead	Nominated Pharmacy Lead(s)	Designated Contacts within On-Site Pharmacy Department	Nominated Nursing Lead(s)	NCIIIs Approved for Use	Indication	Licensed Status LM / ULM / LM but unlicensed indication	Aseptic Manipulation /Preparation Required	Storage in Clinical Area Authorised	Approved Dose Range	Upper Limit	Folder/ Information Storage Location	Location of Intralipid for Potential LA Toxicity
INS Ward 61 Ward 63 Ward 64 Ward 65 Ward 66 Ward 67 Ward 68 Neuro- theatres	Miss Patricia Littlechild, Consultant Neuro- surgeon, INS, SGUH Ext 62456 Deputy: Dr Roddy O'Kane, Consultant Neuro- surgeon, INS, SGUH Ext 62021	Lesley Murray	Lesley Murray / Joanne Gallagher	C/N Graeme McAdam Ext 62008	Intra-ventricular gentamicin vials 5mg/ml, very occasionally intrathecal	Bacterial meningitis	Licensed medicine	No – authorised for storage in ward 61. Subject to NCIII controls within and on leaving pharmacy.	Yes	Usually 5mg per day	5mg	Ward 61 Beside Fridge.	N/A
					Intra-ventricular vancomycin PFS 20mg/8ml	Bacterial meningitis	Unlicensed medicine	No – authorised for storage in ward 61. Subject to NCIII controls within and on leaving pharmacy.	Yes	Depends on space / age of child / pressure	Max 8ml		
					Vancomycin 125mg/50ml supplied in 50ml syringes	Shunt washing (intrathecal quality)	Unlicensed medicine	Yes, prepared in pharmacy PPU	Yes	N/A – for topical use only.			
					Amikacin	Bacterial meningitis	Licensed medicine but unlicensed use	Yes, prepared in pharmacy PPU.	No - ordered on named patient basis from pharmacy.	Rarely required. If used in future, it would be following failure of well-established therapies and would only be used following multidisciplinary consultation at a senior level with neurosurgeons, microbiology, pharmacy and nursing colleagues.			
					Intrathecal baclofen 10, 50, 500 & 2000micro-grams/ml	Spasticity	Licensed medicine	Yes, prepared in pharmacy PPU.	No - ordered on named patient basis from pharmacy.	Not applicable.	1000micro-grams/day. Occasionally higher doses may be necessary & prescriptions must be checked by 2 consultants.	Ward 61 Beside Fridge.	
					Intrathecal baclofen 100, 200, 300, 400, 1000 & 3000micro-grams/ml	Spasticity	Unlicensed medicine						

**NHSGGC Regional Sector:
 Authorised NCIII List for Neurosciences (continued):**

Department	Designated Lead	Nominated Pharmacy Lead(s)	Designated Contacts within On-Site Pharmacy Department	Nominated Nursing Lead(s)	NCIIIs Approved for Use	Indication	Licensed Status LM / ULM / LM but unlicensed indication	Aseptic Manipulation /Preparation Required	Storage in Clinical Area Authorised	Approved Dose Range	Upper Limit	Folder/ Information Storage Location	Location of Intralipid for Potential LA Toxicity
Neuro-surgery OPD	Miss Patricia Littlechild, Consultant Neurosurgeon, INS, SGUH Ext 62456 Deputy: Dr Roddy O'Kane, Consultant Neurosurgeon, INS, SGUH Ext 62021	Lesley Murray	Lesley Murray / Joanne Gallagher	Sr Christine Rankin Ext 61984/3	Intrathecal baclofen 50, 500 & 2000micrograms/ml	Spasticity	Licensed medicine	Yes, prepared in pharmacy PPU.	No - ordered on named patient basis from pharmacy.	Not applicable.	1000micrograms/day. Occasionally higher doses may be necessary & prescriptions must be checked by 2 consultants.	Outpatients Department	N/A
					Intrathecal baclofen 100, 200, 300, 400, 1000 & 3000micrograms/ml	Spasticity	Unlicensed medicine						
					Intrathecal clonidine	Removed from the register at the request of Miss Littlechild, 25.08.2014.							

**NHSGGC Regional Sector:
 Authorised NCIII List for Neurosciences (continued):**

Department	Designated Lead	Nominated Pharmacy Lead(s)	Designated Contacts within On-Site Pharmacy Department	Nominated Nursing Lead(s)	NCIIIs Approved for Use	Indication	Licensed Status LM / ULM / LM but unlicensed indication	Aseptic Manipulation /Preparation Required	Storage in Clinical Area Authorised	Approved Dose Range	Upper Limit	Folder/ Information Storage Location	Location of Intralipid for Potential LA Toxicity
Neuro-radiology	Dr Sarah Jenkins, Consultant Neuro-radiologist, Institute of Neurological Sciences SGUH, ext 67552 or 67739 Authorised Neurosurgeons can also administer Niopam® 300 and will obtain supplies as required from Neuro-radiology.	Lesley Murray	Lesley Murray / Joanne Gallagher	N/A	Intrathecal iopamidol Niopam® 300	X-ray contrast medium for use in lumbar and thoraco-cervical myelography, cerebral angiography, peripheral angiography, venography, computer tomography enhancement, urography and arthrography, CT myelography; CT ventriculography: CT shunt assessment; baclofen pump assessment (currently the commonest use); CT for possible CSF leak.	Licensed Medicine	No. Also used via other routes and access required 24 hours a day therefore not subject to NCIII controls within and on leaving pharmacy.	Yes – potentially required in emergency out-of-hours situations. Stored in CT Room 2, CT Room 4 and Angiogram Room 1.	Niopam® 300 5-10ml	Niopam® 300 10ml	CT Room 2 with Niopam® 300 contrast media.	N/A
					Licensed Medicine		Niopam® 300 5-10ml			Niopam® 300 10ml			

**NHSGGC Regional Sector:
 Authorised NCIII List for Physically Disabled Rehabilitation Unit:**

Department	Designated Lead & Staff Approved	Nominated Pharmacy Lead(s)	Designated Contacts within On-Site Pharmacy Department	Nominated Nursing Lead(s)	NCIIIs Approved for Use	Indication	Licensed Status LM / ULM / LM but unlicensed indication	Aseptic Manipulation /Preparation Required	Storage in Clinical Area Authorised	Approved Dose Range	Upper Limit	Information Location	Location of Intralipid for Potential LA Toxicity
QEUH: PDRU	Dr Colin O'Leary (CD) and Dr Mariel Purcell (Spinal Injuries) have approved Dr Sohail Ansari	Lesley Murray	Lesley Murray / Joanne Gallagher	N/A	Intrathecal phenol 5%	Intractable spasticity	Unlicensed medicine	No, due to instability, it must be prepared and administered immediately prior to use.	No, must be ordered on a named patient basis and issued to the administrator immediately prior to use. Supplied via NVH Pharmacy to RHC Aseptic Unit immediately prior to use.	Up to 5ml of phenol 5% in glycerol	5ml of 5% phenol in glycerol	Held by Dr Ansari and Lesley Murray	N/A

NHSGGC Mental Health:

Authorised NCIII List for Old Age Psychiatry: APPLICATION TO USE BEING PROCESSED, NOT YET APPROVED, JUNE 2017

Department	Designated Lead	Nominated Pharmacy Lead(s)	Designated Contacts within On-Site Pharmacy Department	Nominated Nursing Lead(s)	NCIIIs Approved for Use	Indication	Licensed Status LM / ULM / LM but unlicensed indication	Aseptic Manipulation /Preparation Required	Storage in Clinical Area Authorised	Approved Dose Range	Upper Limit	Information Location	Location of Intra-lipid for Potential LA Toxicity
Old Age Psychiatry	Dr Stuart Ritchie, Consultant Psychiatrist	Colin Rodden, Senior Pharmacist Clinical Trials	Joanne Gallagher, Aseptic Accountable Pharmacist	Linda Wilson / Karen Duffy	Intrathecal WVE-12010 ₁ (which sits within the class known as ASO's)	Wave Study in Huntington's Disease	Trial medication	Yes, made in pharmacy and ordered on named-patient basis on agreed request form.	No - ordered on named patient basis from pharmacy.	Dose cohorts of 2mg, 4mg, 8mg and 16mg	16mg		
					Intrathecal WVE-12010 ₂ (which sits within the class known as ASO's)	Wave Study in Huntington's Disease	Trial medication	Yes, made in pharmacy and ordered on named-patient basis on agreed request form.	No - ordered on named patient basis from pharmacy.	Dose cohorts of 2mg, 4mg, 8mg and 16mg	16mg		

Study also supported by:

Dr Samantha Carmichael MRPharmS
 Lead Pharmacist Clinical Trials / R&D
 Clinical Research & Development, NHS Greater Glasgow & Clyde
 West Glasgow Ambulatory Care Hospital
 Dalnair Street
 Glasgow G3 8SW

Dr Erica Packard
 Mental Health Research Co-ordinator
 NHS Greater Glasgow and Clyde & Glasgow City HSCP
 Commonwealth House
 32 Albion Street
 Glasgow G1 1LH

NHSGGC Pharmacy Prescribing and Support Unit:

Designated Lead Aseptic Services: Scott Nicol, Lead Pharmacist Preparative Services, NHSGGC

Responsible for Policy Adherence with Respect to Ordering, Preparation, Issue, Transportation and Storage for NCIII's Prepared in Pharmacy

Designated Lead Pharmacy Distribution Centre: Gayle Robertson, Manager Clinical Technical Services Pharmacologistics, NHSGGC

Responsible for Policy Adherence with Respect to Ordering, Issue, Transportation and Storage for NCIII's Issued from the Pharmacy Distribution Centre

Designated Lead Pharmacy Dispensary/On-Site Distribution: Joanne Barton (Lead Pharmacy Technician Operations & Medicines Management)

Responsible for Policy Adherence with Respect to Ordering, Issue, Transportation and Storage for NCIII's Issued from the Pharmacy Acute Dispensaries and Distribution Areas