D&T Decisions

… from the Drugs and Therapeutics Committee

Issue #69: July 28, 2020

The information in this newsletter may also be accessed online.
To request a change to the NSHA Hospital Formulary select & complete the online "Drug Request Form":
http://cdhaintra/departmentservices/pharmacy/Formulary/index.cfm

Inside this Issue…

The following policies were approved by the Medical Advisory Committee (Feb 20, Jun 20, Jul 20) on the recommendation of the Drugs and Therapeutics Committee (Feb 20, May 20, Jun 20).

I. Additions to Hospital Formulary

Glecaprevir & pibrentasvir/ *Maviret*®
Sofosbuvir & velpatasvir/ *Epclusa*®
Ledipasvir & sofosbuvir/ *Harvoni*®
Elbasavir & grazoprevir/ *Zepatier*®

Hepatitis C virus (HCV) infection rates have been high among inmates of Canadian correctional facilities and guidelines recommend treatment for chronically infected individuals whose jail sentence is sufficiently long to complete a recommended course of antiviral therapy. However, access to HCV treatment in Nova Scotia has been limited by the fact that NS Pharmacare coverage is deactivated while in corrections, policies prohibit the use of a patient's own medications and for some correctional facilities, medications fall within the NSHA hospital budget/ Formulary. Since the NSHA Hospital Formulary did not include first line direct acting antiviral agents (DAAs), an evaluation of glecaprevir/ pibrentasvir (Maviret®) was completed.

Glecaprevir/ pibrentasvir may be preferred over other first line alternatives as it is pan-genotypic and the eight week treatment duration recommended for treatment-naive HCV patients without cirrhosis (the largest proportion of HCV patients) is shorter than that recommended for other available DAAs. Selection of an appropriate DAA must also consider HCV genotype, drug interactions, and previous treatment failure.

At the time of the Drugs and Therapeutics (D&T) Committee's first review of the glecaprevir/ pibrentasvir Formulary Evaluation (Oct 2018) it was not a benefit with the NS Provincial Drug Plan Formulary (Pharmacare); however, three other first line DAAs were listed as a benefit with NS Pharmacare: velpatasvir/ sofosbuvir (Epclusa®), sofosbuvir/ ledipasvir (Harvoni®), elbasavir/ grazoprevir (Zepatier®). These three DAAs were added to the NSHA Hospital Formulary without restrictions (D&T Oct 18, HAMAC Jan 19).

Since glecaprevir/ pibrentasvir was not a benefit with NS Pharmacare in 2018, the original recommendation was to add it to Hospital Formulary with restrictions; however, glecaprevir/ pibrentasvir has subsequently been added as a benefit with NS Pharmacare and the Hospital Formulary restrictions have been removed (i.e., glecaprevir/ pibrentasvir is added to the NSHA Hospital Formulary without restrictions).

Letermovir/ *Prevymis*®

Letermovir is an antiviral agent indicated for the prophylaxis of cytomegalovirus (CMV) infection in adult CMV seropositive recipients of an allogenic hematopoietic stem cell transplant (HSCT). Letermovir's antiviral action against CMV is the result of inhibition of DNA terminase complex, which is required for viral DNA replication.

CMV, a member of the herpesvirus family, is a widespread virus capable of establishing latent infection following resolution of acute or primary infection. Re-activation of primary CMV infection may range in severity from asymptomatic viral shedding to life-threatening disseminated disease. CMV is the most common clinically significant viral infection following allogeneic HSCT. Although ganciclovir and valganciclovir may be used for prophylaxis of CMV, they have been associated with neutropenia;

therefore, these agents are used primarily for treatment. Foscarnet is another treatment option but its use is limited by significant nephrotoxicity.

Letermovir has demonstrated superiority to placebo for the prevention of CMV in patients who have recently undergone allogeneic HSCT; however, letermovir is more expensive than available alternatives and there are no comparative trials. Since letermovir has a unique mechanism of action, it may be useful for patients with resistance to other antivirals and it has been suggested that it may be beneficial in patients at highest risk of CMV infection. Letermovir appears to be well-tolerated, with no reports of impairment of hematologic or renal function.

Approved Restriction: (D&T Sep 19, HAMAC Oct 19)
Addition to the systemic antimicrobial formulary as a red category agent (i.e., requiring antimicrobial stewardship review within 72 hours). Guidelines recommend use only as CMV treatment or secondary prophylaxis (maintenance) in allogeneic hematopoietic stem cell transplant patients when ganciclovir or valganciclovir cannot be used.

Edoxaban/ *Lixiana*®

Edoxaban is an oral selective, direct factor Xa inhibitor and is one of four direct oral anticoagulants (DOACs) approved by Health Canada. For decades, the vitamin K antagonist warfarin has been the standard of care anticoagulant for the prevention of stroke and systemic embolic events in patients with nonvalvular atrial fibrillation (NVAF). Edoxaban offers the same practical advantages over warfarin as the other DOACs: fixed oral dosing regimens that do not require INR based adjustments.

When compared directly to warfarin, edoxaban 30 mg (low dose) and 60 mg (high dose) once daily, demonstrated non-inferiority for the prevention of stroke or systemic embolic events. In terms of safety, edoxaban was associated with consistently lower rates of major plus clinically relevant nonmajor bleeding, intracranial bleeding, and life-threatening bleeding. Gastrointestinal (GI) bleeding is an exception to this safety profile as rates were higher in patients taking 60 mg edoxaban than those taking warfarin. Although 30 mg edoxaban regimen had similar efficacy in reducing stroke and systemic embolic events, the rate of ischemic stroke was higher in this group compared to warfarin.

An indirect comparison analysis evaluated the efficacy and safety of the two dosing strategies of edoxaban to other DOACs by comparing the results of the large phase 3 trials for each DOAC: ARISTOTLE for apixaban; ENGAGE-AF for edoxaban; RE-LY for dabigatran; ROCKET-AF for rivaroxaban. For the efficacy endpoints compared, edoxaban was comparable to apixaban, dabigatran 110 mg bid, and rivaroxaban but was inferior to dabigatran 150 mg bid. For the safety endpoints, the high dose edoxaban regimen had more major bleeding than apixaban, less major bleeding than rivaroxaban, and comparable major bleeding to both doses of dabigatran. High dose edoxaban, dabigatran 150 mg bid and rivaroxaban are all associated with more GI bleeding than warfarin. Low dose edoxaban showed poorer efficacy than apixaban, dabigatran 150 mg bid, and rivaroxaban but showed similar efficacy to dabigatran 110 mg bid. Comparison of safety profiles tended to favour low dose edoxaban.

Approved Restriction:

- Patients maintained on established therapy.
- At risk patients with nonvalvular atrial fibrillation (NVAF) who require edoxaban for the prevention of stroke and systemic embolism AND whom:
    - Anticoagulation is inadequate following at least a 2 month trial on warfarin
      OR
    - Anticoagulation with warfarin is contraindicated or not possible due to inability to regularly monitor via INR testing (i.e. no access to INR testing services at a laboratory clinic, pharmacy, and at home)

Levetiracetam IV/ *pdp- levETIRAcetam*

Levetiracetam is a broad-spectrum antiepileptic drug with a unique mechanism of action. Oral levetiracetam was added to the Hospital Formulary in 2014; however, levetiracetam IV only received Health Canada market approval in Oct 2019 (the IV formulation was previously accessed via the Health Canada Special Access Program). Levetiracetam is not highly protein bound (< 10%) thereby allowing for more predictable, linear pharmacokinetics compared to alternatives such as phenytoin. The metabolism of levetiracetam is mainly via an enzymatic hydrolysis of the acetamide group and is not dependent on liver cytochrome P450 thereby reducing the amount of potential drug interactions. The metabolites have no known pharmacodynamic activity and are renally excreted.

Levetiracetam for injection is Health Canada approved for IV use only as an alternative for patients when oral administration is temporarily not feasible. As well as defined pediatric indications, it is indicated as an adjunctive therapy in the management of adult patients with epilepsy who are not satisfactorily controlled by conventional therapy.

Similar to most new generation antiepileptic drugs (AEDs), levetiracetam IV may be used off label for status epilepticus (SE). The evidence for the use of IV levetiracetam in the treatment of SE has been mostly limited to observational, retrospective reviews. Recently, there has been an attempt in the literature to provide higher quality randomized controlled trials and meta-analysis to evaluate the efficacy of AEDs in SE. The definition of SE, patient population, dosing and injection timing of levetiracetam, duration of follow up as well as the timeline for clinical termination of SE and subsequent definition of efficacy for AEDs in SE remains variable across studies.

Approved Restriction:

- Treatment of status epilepticus in critically ill patients who do not have enteral access;
  OR
- Management of seizures after discussion with a neurologist;
  OR
- Patients maintained on oral levetiracetam when oral administration is temporarily not feasible.

Insulin degludec/ *Tresiba*®

Insulin degludec is an ultra-long acting basal insulin approved for once daily administration to improve glycemic control in diabetic patients. Following subcutaneous administration, insulin degludec forms soluble multihexamers resulting in a depot from which monomers are slowly and continuously absorbed into the circulation. This mechanism leads to the reported ultra-long pharmacokinetic and pharmacodynamic profile (i.e., a duration of action of approximately 42 hours) and reduced variability in insulin action compared to other long-acting insulins that have a maximum duration of action of approximately 24 hours. Insulin degludec dosing is more flexible (i.e., injections may be given a minimum of 8 and a maximum of 40 hours apart) which may be an advantage for those who find it difficult to take basal insulin at a regular time. There are two formulations of insulin degludec (100 units/ mL and 200 units/ mL) that have similar glucose-lowering effects and half-lives.

The efficacy and safety of insulin degludec was studied in three double-blind, randomized control trials [DEVOTE (N = 7,637), SWITCH-1 (N = 501), SWITCH-2 (N = 720)] as well the open-label BEGIN clinical trial program that demonstrated comparable glycemic control to insulin glargine and the BRIGHT trial, an open-label, noninferiority trial of insulin degludec 100 units/ mL vs insulin glargine 300 units/ mL that found a similar reductions in HbA1c.

DEVOTE was a 24 month cardiovascular outcomes study in patients with Type 2 Diabetes Mellitus and cardiovascular disease. Insulin degludec was noninferior to insulin glargine for a composite of major cardiovascular events.

The SWITCH studies compared insulin degludec with insulin glargine in a crossover design in patients with Type 1 (SWITCH-1) and Type 2 (SWITCH-2) Diabetes Mellitus in two separate 32 week treatment periods. The primary outcome of the SWITCH trials was the overall rate of severe or blood glucose–confirmed symptomatic hypoglycemic events. In both trials, there was a statistically significant reduction in outcomes for insulin degludec versus insulin glargine.

The Canadian Diabetes Guidelines recommend that insulin degludec may be used instead of detemir or glargine 100 units/ mL to reduce nocturnal hypoglycemia for patients with Type 1 diabetes. For patients with Type 2 diabetes, they recommend that insulin degludec may be considered over insulin glargine 100 units/ mL to reduce overall and nocturnal hypoglycemia.

II. Non-Formulary

Acetaminophen injection (Anesthesia)

The IV formulation of acetaminophen has recently been approved by Health Canada and added to the NSHA Hospital Formulary with restrictions to Critical Care for patient analgesia in clinical situations when the enteral route is not possible (D&T Decisions Issue #68: Feb. 12, 2020). Acetaminophen is a centrally acting non-opioid, non-salicylate analgesic with antipyretic effects and one of the few non-opioid analgesics available for the oral, rectal and IV route. However, acetaminophen injection is more expensive than other analgesia options.

The request to expand the current NSHA Hospital Formulary restrictions for acetaminophen injection to include Anesthesia was not approved. Acetaminophen IV has a limited place in therapy for Anesthesia and Formulary restrictions are difficult to maintain in the OR setting. From a resource perspective, acetaminophen injection was not deemed cost effective for Anesthesia at this time. Acetaminophen injection remains on the NSHA Hospital Formulary with restrictions specific to Critical Care.

III. Expanded Restrictions

InFLIXimab/ *Remicade*®

InFLIXimab is a chimeric monoclonal antibody that inhibits tumour necrosis factor-alpha (TNFα). The overproduction of TNFα (a pro-inflammatory cytokine) plays a role in the pathogenesis of some diseases associated with inflammation. InFLIXimab was first evaluated for the QEII Formulary in 1999 for the treatment of rheumatoid arthritis and Crohn's Disease. Since that time, several other indications have been considered; therefore, the Hospital Formulary restrictions for inFLIXimab include the treatment of patients with a diagnosis of rheumatoid arthritis, ankylosing spondylitis, psoriasis, psoriatic arthritis, Crohn's disease, and ulcerative colitis (as per the Pharmacare exception status criteria for inFLIXimab). At NSHA, Remicade® is the approved product since it is less costly than Inflectra®.

Cancer immunotherapy, a new therapeutic option in oncology, has significantly improved patient survival in metastatic disease and many patients with previously incurable tumours may experience long-term remission with treatment. Immune checkpoint inhibitors (CPIs) are monoclonal antibodies targeted against the checkpoint proteins cytotoxic T-lymphocyte-associated protein 4 (CTLA-4) and programmed cell death protein 1/ programmed cell death protein ligand 1 (PD-1/ PD-L1). Immune CPIs are current treatment options for patients with advanced melanoma, lung cancer, renal cell carcinoma, bladder cancer, Hodgkin lymphoma as well as other indications. Health Canada approved CPIs include: ipilimumab (CTLA-4 inhibitor); pembrolizumab and nivolumab (PD-1 inhibitors); atezolizumab, avelumab and durvalumab (PDL-1 inhibitors).

The immune response to immune CPIs leads to different adverse effects (AEs) than those seen with traditional chemotherapies and targeted therapies. Immune CPIs lead to an activated immune system that may affect healthy tissue/ organs and cause inflammatory or autoimmune like AEs. Symptoms of autoimmune like AEs may be reversible (e.g., fatigue, pruritus, rash, myalgia, arthralgia, loss or change of appetite, hypo-hyperthyroidism), irreversible (e.g., diabetes mellitus, uveitis, arthritis, some cases of hypothyroidism) or severe and potentially life threatening (e.g., hepatitis, colitis, hypophysitis, pneumonitis, myocarditis, Guillain-Barre, myasthenia gravis, encephalitis).

Early recognition of these immune AEs is important to avoid life threatening toxicities. Patient treatment may require hospitalization in consultation with medical oncology/ hematology and organ specific specialists. Guidelines for the diagnosis and management of immune CPI related AEs recommend that if symptoms of grade 3 or higher toxicities do not improve with 48 to 72 hours of first line high dose corticosteroid therapy, inFLIXimab may be offered as second line therapy for some toxicities.

Evidence for these recommendations consist of systemic reviews of observational data, case series and case reports. Since colitis is the most common serious complication, the majority of published data report on the role of inFLIXimab treatment of immune CPI induced colitis.

Approved Restriction:
Management of severe immune-mediated adverse events (e.g., pneumonitis, colitis) associated with immune checkpoint inhibitors (CPIs).

IV. Therapeutic Interchange

Cefazolin

The prophylaxis for Group B Streptococcus during labour and delivery has been approved as an exception to the cefazolin 1 g to cefazolin 2 g therapeutic interchange.

Antimicrobial order	Dispensed as
Cefazolin 1 g IV any frequency	Cefazolin 2 g IV same frequency **Exception:** Prophylaxis for Group B Streptococcus during labour and delivery – Cefazolin 2 g IV x 1 dose then cefazolin 1 g IV q8h until delivery

V. New Guidelines

Siltuximab/ *Sylvant*®

A new guideline has been approved for the role of siltuximab in patients with previously treated or untreated multicentric Castleman's disease.

Approved Restriction:
For previously treated or untreated multicentric Castleman's disease in patients who are human immunodeficiency virus (HIV) negative, human herpes virus-8 (HHV-8) negative and who have an ECOG performance status of less than or equal to 2. Treatment should continue until treatment failure.

Inotuzumab ozogamicin/ *Besponsa™*

A new guideline has been approved for the role of inotuzumab ozogamicin in patients with B-Cell Acute Lymphoblastic Leukemia (ALL).

Approved Restriction:
As a single agent treatment option in adult patients with relapsed or refractory B-cell precursor acute lymphoblastic leukemia (ALL). Eligible patients include Philadelphia chromosome (Ph) - positive and (Ph)-negative relapsed or refractory B cell precursor ALL with a good performance status.

For patients with (Ph)-positive ALL, failure with at least one second-generation or third-generation tyrosine kinase inhibitor (TKI) and standard multi-drug induction chemotherapy is required before treatment with inotuzumab ozogamicin.

Treatment should be continued until unacceptable toxicity or disease progression, up to a maximum of three cycles, for those patients proceeding to hematopoietic stem cell transplant (HSCT).

For patients not proceeding to HSCT who achieve a complete response or complete response with incomplete count recovery (CR/Cri) and minimal residual disease negativity, treatment may be continued for a maximum of six cycles.

Trastuzumab/ *Trazimera*®

Effective January 13, 2020, NSHA Cancer Care Program will implement the use of a biosimilar in all provincially funded protocols prescribing trastuzumab (Herceptin®) according to approved guidelines. NSHA pharmacies will stock trastuzumab-Trazimera® as the designated biosimilar.

The following outlines key funding details:

- New patients who are prescribed trastuzumab for all New Cancer Drug Fund (NCDF) funded indications on or after January 13, 2020 will be approved for biosimilar trastuzumab (Trazimera®) only.
- Patients who started treatment with the reference biologic, Herceptin®, prior to Jan 13, 2020, may continue to receive it for the remaining duration of their treatment.

Note: Clinicians may choose to switch patients currently receiving trastuzumab to the biosimilar, after discussion with the patient. This must be clearly documented in the patient's electronic record. A new consent for treatment is not required.

- Patients who have had a treatment break may continue to receive their original brand of trastuzumab if restarting the same protocol.
- Patients receiving pertuzumab (Perjeta®) with trastuzumab as combination treatment will receive Herceptin® brand as this treatment is supplied by the manufacturer as a combination pack.

Netupitant & palonosetron/ *Akynzeo™*

A new guideline has been approved for the role netupitant/ palonosetron for the prevention of acute and delayed nausea and vomiting in patients receiving chemotherapy.

Approved Restriction:
In combination with dexamethasone for the prevention of acute and delayed nausea and vomiting in patients receiving:

- highly emetogenic chemotherapy, or
- moderately emetogenic chemotherapy who have had inadequate symptom control using a 5-HT3 antagonist and dexamethasone in a previous cycle.

VI. Revised Guidelines

Aprepitant/ *Emend*®

Revised guidelines have been approved for the role of aprepitant for the prevention of acute and delayed nausea and vomiting in patients receiving chemotherapy.

Approved Restriction:
In combination with a 5-HT3 antagonist and dexamethasone for the prevention of acute and delayed nausea and vomiting in patients receiving:

- highly emetogenic chemotherapy, or
- moderately emetogenic chemotherapy who have had inadequate symptom control using a 5-HT3 antagonist and dexamethasone in a previous cycle.

VII. Expanded Guidelines

Blinatumomab/ *Blincyto*®

A new guideline has been approved for the role of blinatumomab in patients with B-Cell Acute Lymphoblastic Leukemia (ALL).

Approved Restriction:

As a single agent treatment option in adult patients with Philadelphia chromosome-negative (Ph-) relapsed or refractory B precursor acute lymphoblastic leukemia (ALL). Treatment should be for patients with a good performance status and should be treated for two cycles of induction and 3 cycles of consolidation.

As a single agent treatment option in adult patients with Philadelphia chromosome-positive (Ph+) B precursor acute lymphoblastic leukemia (ALL) and who have been treated with at least two prior tyrosine kinase inhibitors and have relapsed or refractory disease. Treatment should be in patients with a good performance status.

Pembrolizumab/ *Keytruda*®

Five new guidelines have been approved for pembrolizumab.

A new guideline has been approved for the role of pembrolizumab for adjuvant melanoma.

Approved Restriction:

For the adjuvant treatment of patients with cutaneous melanoma with completely resected Stage IIIA (limited to lymph node metastases of ≥ 1 mm) to Stage IV (8th edition of the American Joint Committee on Cancer [AJCC] melanoma staging system), regardless of BRAF status. Disease must be completely resected including in-transit metastases; however, presence of regional lymph nodes with micrometastases after sentinel lymph node biopsy alone is allowed. Patients should have a good performance status and brain metastases, if present, must be completely resected (or definitively treated with stereotactic radiation). Eligible patients should continue treatment until disease progression or a maximum of 1 year, whichever comes first.

A new guideline has been approved for the role of pembrolizumab for relapsed or refractory Hodgkin's Lymphoma.

Approved Restriction:

For the treatment of patients with classical Hodgkin's Lymphoma (cHL) that have relapsed or progressed after autologous stem cell transplantation (ASCT) and brentuximab vedotin (BV). Patients should have a good performance status. Treatment should continue until confirmed disease progression or unacceptable toxicity.

A new guideline has been approved for the role of pembrolizumab for metastatic urothelial carcinoma.

Approved Restriction:

As a single agent treatment option for patients with locally advanced or metastatic urothelial carcinoma (MUC) who have disease progression during or following platinum-based chemotherapy or within 12 months of completing neoadjuvant or adjuvant platinum-based chemotherapy. Patients should have a good performance status.

Treatment should continue until confirmed disease progression or unacceptable toxicity or to a maximum of 2 years of treatment.

A new guideline has been approved for the role of pembrolizumab in combination with carboplatin and paclitaxel chemotherapy for metastatic squamous non-small cell lung cancer (NSCLC) first line treatment.

Approved Restriction:

In combination with carboplatin and paclitaxel chemotherapy for the treatment of metastatic squamous non-small cell lung cancer (NSCLC), in patients with no prior systemic chemotherapy treatment for metastatic NSCLC. Patients should have a good performance status. Treatment should continue until confirmed disease progression or unacceptable toxicity, or to a maximum of two years (35 cycles), whichever comes first.

A new guideline has been approved for the role of pembrolizumab in combination with pemetrexed and platinum chemotherapy for metastatic non-squamous non-small cell lung cancer (NSCLC) first line treatment.

Approved Restriction:

In combination with pemetrexed and platinum chemotherapy for the treatment of metastatic non-squamous non-small cell lung cancer (NSCLC), in patients with no EGFR or ALK genomic tumour aberrations, and no prior systemic chemotherapy treatment for metastatic NSCLC. Patients should have a good performance status. Treatment should continue until confirmed disease progression or unacceptable toxicity, or to a maximum of two years (35 cycles), whichever comes first.

Nivolumab/ *Opdivo*

Two new guidelines have been approved for nivolumab.

A new guideline has been approved for the role of nivolumab for adjuvant melanoma.

Approved Restriction:

For the adjuvant treatment of patients with cutaneous or mucosal melanoma with completely resected Stage IIIA (limited to lymph node metastases of ≥ 1 mm) to Stage IV (8th edition of the American Joint Committee on Cancer [AJCC] melanoma staging system), regardless of BRAF status. Disease must be completely resected including in-transit metastases; however, presence of regional lymph nodes with micrometastases after sentinel lymph node biopsy alone is allowed. Patients should have a good performance status and brain metastases, if present, must be completely resected (or definitively treated with stereotactic radiation). Eligible patients should continue treatment until disease progression or a maximum of 1 year, whichever comes first.

A new guideline has been approved for the role of nivolumab for relapsed or refractory Hodgkin's Lymphoma.

Approved Restriction:

For the treatment of patients with classical Hodgkin's Lymphoma (cHL) that has relapsed or progressed after autologous stem cell transplantation (ASCT) and brentuximab vedotin (BV). Patients should have a good performance status. Treatment should continue until confirmed disease progression or unacceptable toxicity.

VIII. Order Sets

The following order sets have been approved by the Medical Advisory Committee on the recommendation of the Drugs and Therapeutics Committee.

NS_OSABVDAVD ABVD or AVD Subsequent Treatment of Hodgkin Lymphoma Following Interim PET (iPET) (NS)
NS_OSABVDIT ABVD Initial Treatment of Hodgkin Lymphoma (NS)
NS_OSCLLSLL Bendamustine / Rituximab – Chronic Lymphocytic Lymphoma (CLL) or Small Lymphocytic Lymphoma (SLL) (NS)
NS_OSCLLSLLPR Venetoclax / Rituximab (IV / subcut) – Relapsed or Refractory Chronic Lymphocytic Lymphoma (CLL) or Small Lymphocytic Lymphoma (SLL) - Post Ramp-Up Phase (NS)
NS_OSCOPDC Acute Exacerbation of Chronic Obstructive Pulmonary Disease (COPD) (CZ)
NS_OSEBITHL Escalated BEACOP (esc BEACOPP) – Initial Treatment of Hdgkin Lymphoma (NS)
NS_OSEBSTHL Escalated BEACOPP (esc BEACOPP) – Subsequent Treatment of Hodgkin Lymphoma Following Interim PET (iPET) (NS)
NS_OSFCRCLL Fludarabine / Cyclophosphamide / Rituximab (IV / subcut) – Chronic Lymphocytic Leukemia (CLL) (NS)
NS_OSIRMAPP Interventional Radiology – Management After Percutaneous Procedure (CZ, WZ, EZ)
NS_OSIRMPPP Interventional Radiology – Management Prior to Percutaneous Procedure (CZ, WZ, EZ))
NS_OSIRACD Interventional Radiology – Arterial Catheter Directed Alteplase Fibrinolysis (CZ)
NS_OSIRTA Interventional Radiology – Tumour Ablation (CZ, EZ, WZ)
NS_OSIIIV Iron Isomaltoside IV (NS)
NS_OSISIV Iron Sucrose IV (NS)
NS_OSNABPBR Nanoparticle Albumin Bound (NAB)-Paclitaxel – Breast Regimen (q21 days or Weekly) (NS)
NS_OSNIAM Nivolumab / Ipilimumab – Advanced Melanoma or Advanced Renal Cell Carcinoma (NS)
NS_OSPLDGR Pegylated Liposomal Doxorubicin – Gyne Regimen (NS)
NS_OSPPTI Prolonged Piperacillin – Tazobactam Infusion for Intensive Care Patients (QEII)
NS_OSRPESA Erythropoiesis Stimulation Agent – Renal Program (NS)
NS_OSRPIT Iron Therapy - Renal Program (NS)
NS_OSRTLSP Rasburicase – Tumour Lysis Syndrome (NS)
NS_OSVCLLSLL Ventoclax – Relapsed or Refractory Chronic Lymphocytic Leukemia (CLL) or Small Lymphocytic Leukemia (SLL) – Ramp-up Phase (NS)
NS_PPOCSSTO Cardiovascular Surgery Standard Transfer Orders (CZ)

IX. IV Manual

Since the last D&T Decisions, three NSHA IV Drug Therapy Manual and smart pump updates have occurred (refer to list and links below). These memos are distributed to physicians, health service managers and nurse educators in each zone via Executive Directors of Operations and Medicine. If you believe you should be receiving these memos but are not email theresa.hurley@nshealth.ca to obtain the name of your contact.

April 3, 2020
http://intra.nshealth.ca/clinical-resources/infusiontherapy/IV%20Drug%20THerapy%20Manual/Update%20Memos/IV%20Manual%20Update%20200403.pdf

April 24, 2020
http://intra.nshealth.ca/clinical-resources/infusiontherapy/IV%20Drug%20THerapy%20Manual/Update%20Memos/IV%20Manual%20Update%20200424.pdf

July 15, 2020
http://intra.nshealth.ca/clinical-resources/infusiontherapy/IV%20Drug%20THerapy%20Manual/Update%20Memos/IV%20Manual%20Update%20200715.pdf

Update memos may be accessed on the NSHA IV Manual website. http://intra.nshealth.ca/clinical-resources/infusiontherapy/IV%20Drug%20THerapy%20Manual/SitePages/Home.aspx

There is a new IWK website link: https://www.dir.iwk.nshealth.ca/ It may be accessed via the NSHA Infusion Therapy icon on desktops or under Clinical Resources on the NSHA Intranet site. Individual zones may have other links. Additional information is provided in the July 15, 2020 memo. The IWK Pediatric/Neonatal Dosing and Administration Guidelines are the approved resource for drug dosing and administration for pediatric and neonatal patients in NSHA.

Published by the Pharmacy Department
Editor: Deborah MacIntyre, B.Sc. (Pharm.), ACPR
Drug Information Pharmacist
Central Zone

Tel: (902) 473-4248
Email: debbie.macintyre@nshealth.ca