

# Immunosuppressive Medication List

The National Advisory Committee on Immunization (NACI) recommends a third dose of mRNA vaccine for moderate to severe immunocompromised individuals defined as:

- Active treatment for solid tumor or hematologic malignancies.
- Receipt of solid-organ transplant and taking immunosuppressive therapy.
- Receipt of chimeric antigen receptor (CAR)-T-cell therapy or hematopoietic stem cell transplant (within 2 years of transplantation or taking immunosuppression therapy).
- Moderate to severe primary immunodeficiency (e.g., DiGeorge syndrome, Wiskott-Aldrich syndrome) [see <https://novascotia.ca/dhw/cdpc/documents/primary-immunodeficiency-list.pdf> for more information regarding eligible primary immunodeficiencies].
- Stage 3 or advanced untreated HIV infection and those with acquired immunodeficiency syndrome; [in NS, those with HIV and CD4 count <200 also eligible].
- Active treatment with the following categories of immunosuppressive therapies: anti-B cell therapies (monoclonal antibodies targeting CD19, CD20 and CD22), high-dose systemic corticosteroids (refer to the CIG for suggested definition of high dose steroids), alkylating agents, antimetabolites, or tumor-necrosis factor (TNF) inhibitors and other biologic agents that are significantly immunosuppressive.

<b>Treatment Category</b>	<b>Generic Medication Names</b>	<b>Brand/Biosimilar Medication Names</b>
<b>Active treatment for solid tumor or hematologic malignancies</b>	Active systemic therapy for cancer (or have received systemic therapy in the past 12 months). This includes chemotherapy, immunotherapy and targeted agents. Excludes hormonal agents <sup>1</sup> . Excludes those receiving only radiation therapy.	
<b>Receipt of chimeric antigen receptor (CAR)-T-cell therapy -OR- Hematopoietic stem cell transplant (HSCT) (within 2 years of transplantation or taking immunosuppression therapy)</b>	axicabtagene ciloleucel  tisagenlecleucel	Yescarta  Kymriah
<b>Receipt of solid-organ transplant and taking immunosuppressive therapy<sup>2</sup></b>	tacrolimus <sup>3</sup>  sirolimus  everolimus  mycophenolate (mycophenolate mofetil, mycophenolic acid)  cyclosporine <sup>3</sup>  azathioprine	Prograf, Advagraf, Envarsus  Rapamune  Afinitor, Afinitor Disperz, Certican  CellCept, Myfortic  Neoral  Imuran

<b>Treatment Category</b>	<b>Generic Medication Names</b>	<b>Brand/Biosimilar Medication Names</b>
	prednisone	Winpred, Deltasone
	basiliximab	Simulect
	anti-thymocyte globulin	Atgam, Thymoglobulin (also referred to as horse/equine and rabbit)
<b>Moderate to severe primary immunodeficiency (e.g., DiGeorge syndrome, Wiskott-Aldrich syndrome)</b>	See list of eligible primary immunodeficiencies: <a href="https://novascotia.ca/dhw/cdpc/documents/primary-immunodeficiency-list.pdf">https://novascotia.ca/dhw/cdpc/documents/primary-immunodeficiency-list.pdf</a>	
<b>HIV and CD4 count &lt;200</b>		
<b>Anti-B cell therapies (monoclonal antibodies targeting CD19, CD20 and CD22)<sup>4</sup></b>	blinatumomab	Blincyto
	ibritumomab	Zevalin
	rituximab	Rituxan, Rituxan SC, Ruxience*, Riabni*, Riximyo*, Truxima*
	obinutuzumab	Gazyva
	ofatumumab	Kesimpta
	ocrelizumab	Ocrevus
	inotuzumab ozogamicin	Besponsa
	gemtuzumab ozogamicin	Mylotarg
<b>High-dose systemic corticosteroids<sup>5</sup></b>	prednisone ≥ 20 mg for ≥ 14 days <sup>6</sup>	Winpred, Deltasone
	<u>Steroid Equivalencies for Prednisone 20mg:<sup>3</sup></u>	
	hydrocortisone (cortisol) 80mg	Cortef, Solu-Cortef
	cortisone acetate 100mg	Cortone
	prednisolone 20mg	
	methylprednisolone 16mg	Solu-Medrol, Depo-Medrol, Medrol
	triamcinolone 16mg	Aristocort

<b>Treatment Category</b>	<b>Generic Medication Names</b>	<b>Brand/Biosimilar Medication Names</b>
	dexamethasone 3mg	Decadron
	betamethasone 2.4mg	Betnesol
	budesonide 1.5mg	Jorveza, Entocort
<b>Alkylating agents</b>	bendamustine (nitrogen mustard)	Treanda
	busulfan (alkyl sulfonate)	
	carboplatin (platinum)	Paraplatin
	carmustine (nitrosurea)	Bicnu
	chlorambucil (nitrogen mustard)	Leukeran
	cisplatin (platinum)	Platinol AQ
	cyclophosphamide (nitrogen mustard)	Procytox
	dacarbazine (triazine)	
	hydroxyurea	Hydrea
	ifosfamide (nitrogen mustard)	Ifex
	lomustine (nitrosurea)	Ceenu
	melphalan (nitrogen mustard)	Alkeran
	oxaliplatin (platinum)	Eloxatin
	procarbazine (triazine)	Mutalane
	streptozocin (nitrosurea)	Zanosar
<b>Antimetabolites</b>	temozolomide (triazine)	Temodal
	thiotepa (aziridine)	Tepadina
	treosulfan	Trecondvy
	azacitidine (pyrimidine analogue)	Vidaza, Onureg

<b>Treatment Category</b>	<b>Generic Medication Names</b>	<b>Brand/Biosimilar Medication Names</b>
	capecitabine (pyrimidine analogue)	Xeloda
	cladribine (adenosine analogue)	Mavenclad
	cytarabine (pyrimidine analogue)	Cytosar (also called ARA-C and HiDAC)
	fludarabine (purine analogue)	Fludara
	fluorouracil <sup>3</sup> (pyrimidine analogue)	Commonly called 5-FU
	gemcitabine (pyrimidine analogue)	Gemzar
	mercaptopurine (purine analogue) >1.5mg/kg/day <sup>6</sup>	Purinethol (also called 6-MP)
	methotrexate (folate analogue): > >0.4 mg/kg/week or >20 mg per week <sup>6</sup>	Rheumatrex, Metoject
	pralatrexate (folate analogue)	Folotyn
	pemetrexed (folate analogue)	Alimta
	raltitrexed (folate analogue)	Tomudex
	thioguanine (purine analogue)	Lanvis
	trifluridine-tipiracil <sup>3</sup> (pyrimidine analogue/thymidine phosphorylase inhibitor)	Lonsurg
	azathioprine (purine antimetabolite): >3.0mg/kg/day <sup>6</sup>	Imuran
	leflunomide (pyrimidine antimetabolite)	Arava
	teriflunomide (pyrimidine antimetabolite)	Aubagio
<b>Tumor-necrosis factor (TNF) inhibitors</b>	adalimumab	Humira, Abrilada*, Amgevita*, Hadlima*, Hulio*, Hyrimoz*, Idacio*
	certolizumab pegol	Cimzia
	etanercept	Enbrel, Brenzys*, Erelzi*

<b>Treatment Category</b>	<b>Generic Medication Names</b>	<b>Brand/Biosimilar Medication Names</b>
	golimumab	Simponi
	infliximab	Remicade, Avsola*, Inflectra*, Omvyence*, Remsima SC*, Renflexis*
IL-1 inhibitor	anakinra	Kineret
	canakinumab	Ilaris
IL-6 inhibitor	tocilizumab	Actemra
	sarilumab	Kevzara
	siltuximab	Sylvant
IL-17 inhibitor	secukinumab	Cosentyx
	ixekizumab	Taltz
	brodalumab	Siliq
IL 12/23 inhibitor	ustekinumab	Stelara
IL 23 inhibitor	guselkumab	Tremfya, Tremfya One-Press
	risankizumab	Skyrizi
Immune checkpoint inhibitors	atezolizumab	Tecentriq
	avelumab	Bavencio
	cemiplimab	Libtayo
	durvalumab	Imfinzi
	ipilimumab	Yervoy
	nivolumab	Opdivo
	pembrolizumab	Keytruda
	tislelizumab	

<b>Treatment Category</b>	<b>Generic Medication Names</b>	<b>Brand/Biosimilar Medication Names</b>
Anti-integrin	vedolizumab	Entyvio
	natalizumab	Tysabri
JAK Inhibitors	baricitinib	Olumiant
	ruxolitinib	Jakavi
	tofacitinib	Xeljanz, Xeljanz XR
	upadacitinib	Rinvoq
T-cell co-stimulation modulators	abatacept	Orencia
Anti B-cell	belimumab	Benlysta
S1P antagonists	fingolimod	Gilenya
	siponimod	Mayzent
	ozanimod	Zeposia

\*Biosimilar product

**1** Hormonal agents excluded are: antiestrogens (tamoxifen, fulvestrant), aromatase inhibitors (anastrozole, exemestane, letrozole), gonadotropin releasing hormone analogues (buserelin, goserelin, leuprolide), luteinizing hormone releasing hormone antagonists (degarelix), progestins (medroxyprogesterone, megestrol), antiandrogens (apalutamide, bicalutamide, darolutamide, enzalutamide, flutamide, nilutamide), androgen biosynthesis inhibitors (abiraterone), androgens (testosterone), somatostatin analogues (lanreotide, octreotide), thyrotropin stimulating hormone agonists (thyrotropin alpha), prolactin lowering agents (bromocriptine, cabergoline, quinagolide)

**2** Individuals taking these agents systemically for other indications also qualify, except prednisone (see **high-dose systemic corticosteroids** section for criteria if not used for transplant)

**3** Only systemic administration qualifies for 3rd dose of mRNA vaccine (ie: topical, ophthalmic/otic, and intraarticular administration do not qualify)

**4** Active treatment for patients receiving B-cell depleting therapy includes patients who have completed treatment within 12 months

**5** In patients on lower dose corticosteroids, check to see if they meet criteria in another category (ie: active treatment for solid tumor or hematologic malignancies, receipt of CAR-T, HSCT or solid organ transplant or on another immunosuppressive agent)

**6** Lower doses qualify if taking two or more immunosuppressive therapies