APPENDIX FOR 2023 POSTER ABSTRACTS / ANNEXE POUR LES RÉSUMÉS DES AFFICHES 2023

Appendix to: Griffore K, Selvakumar K, Wan M, Taggart LR, Leung E. Adherence to recommendations from antimicrobial stewardship audit and feedback rounds in academic intensive care units [abstract]. *Can J Hosp Pharm.* 2023;76(2):147.

TABLE 1: Rates of recommendation acceptance collected from PAF during selected ASP rounds								
	Trauma and Neurosurgery ICU		Medical Surgical ICU		Cardiovascular ICU		ICUs combined	
	recommendation (n)	accepted	recommendation (n)	accepted	recommendation (n)	accepted	recommendation (n)	accepted
total	134	86.6%	280	85.7%	33	81.8%	447	85.7%
promote appropriate antimicrobial coverage	24	66.7%	52	75%	6	83.3%	82	73.2%
a. expand empiric coverage	9	66.7%	18	77.8%	4	100%	31	77.4%
 b. initiate therapy to cover a positive culture not currently being treated 	0	NA	3	100%	1	100%	4	100%
 c. change agent given positive culture resistant to current therapy 	2	100%	1	100%	0	NA	3	100%
d. change regimen to further optimize therapy	13	61.5%	30	70%	1	0%	44	65.9%
reduce selective pressure	86	77.9%	191	85.3%	22	81.8%	299	82.9%
e. shorten duration of therapy	25	80%	49	87.8%	8	75%	82	84%
f. discontinue agent	24	79.2%	64	79.7%	7	85.7%	95	80%
g. discontinue agent given unnecessary double coverage	1	100%	5	100%	7	85.7%	13	83.6%
h. narrow spectrum	36	75%	73	87.7%	0	NA	109	100%
dose adjustment	11	90.9%	20	85%	4	75%	35	85.7%
Infectious diseases consult	14	100%	32	90.6%	3	100%	49	93.9%

Appendix to: Naccarato S, Beaman A, Hammond E. Evaluating the incidence of hypoglycemia among hyperkalemic patients treated with insulin in the emergency department at Trillium Health Partners (THP) [abstract]. *Can J Hosp Pharm.* 2023; 76(2):150.

		Hy	Hypoglycemia groups		
Parameter	All insulin administrations (n =197)	No hypoglycemia (BG ≥ 4 mmol/L) (n = 149)	Moderate hypoglycemia (BG 2.8 to 3.9 mmol/L) (n = 33)	Severe hypoglycemia (BG < 2.8 mmol/L) (n = 15)	
None	4(2)	3 (2)	0 (0)	1 (6.7)	
25 g	189 (96)	143 (96)	33 (100)	13 (86.7)	
50 g	4(2)	3 (2)	0(0)	1 (6.7)	
Other hyperkalemia treatment given, n (%)	. (=)	0 (2)	0 (0)	2 (0)	
Diuretics	64 (32.5)	48 (32.2)	13 (39.4)	3 (20)	
Cation exchange resins	79 (40.1)	63 (42.3)	10 (30.3)	6 (40)	
Inhaled B2 agonists	63 (32)	56 (37.6)	3 (9.2)	4 (26.7)	
Concomitant medications that \downarrow BG, <i>n</i> (%)	. ,	, ,	. ,	. ,	
Other insulins	16 (8.1)	16 (10.7)	0 (0)	0 (0)	
Secretagogues	1 (0.5)	1 (0.7)	0 (0)	0 (0)	
Concomitant medications that T BG					
Dextrose (from IV drugs), n (%)	55 (27.9)	42 (28.2)	9 (27.3)	4 (26.7)	
Total dextrose (from IV drugs), g (median, IQR)	12.5 (7.5-22.5)	16.9 (9.3 -22.5)	7.5 (4.2 – 21.3)	7 (4-9.3)	
Dextrose (for hypoglycemia), n (%)	25 (12.7)	1 (0.7)	13 (39.4)	11 (73.3)	
Dextrose (for hypoglycemia), g (mean, ± SD)	26.5 ± 8	12.5 ± 0	25 ± 3.9	29.5 ± 10.5	
Blood Glucose					
Hypoglycemic event, n (%)	48 (24.4)		33 (16.8 ^b)	15 (7.6 ^b)	
Lowest value recorded, mmol/L (median, IQR)	5.8 (4-8.7)	6.8 (5.3-10.8)	3.1 (2.8-3.6)	2.1 (1.6-2.4)	
Time of lowest value, hours (median, IQR)	2.7 (1.8-3.73)	2.8 (2-3.8)	2.6 (1.8-2.9)	2.2 (1.6-3.2)	
Hypoglycemic events that occurred > 3 hours post-insulin ^c , <i>n</i> (%)	15/48 (31)	10 (30.3)	5 (33.3)		
Potassium					
$K+ \leq 5 \text{ mmol/L}, n (\%)$	71 (36)	50 (33.6)	14 (42.4)	7 (46.7)	

^a All treatment-related variables were only included if they were given (drugs) or recorded (lab values) within 6-hours post-

insulin administration

^bPercentage out of the entire project sample (n = 197)

^c Includes 48 administrations where hypoglycemia (BG < 4 mmol/L) occurred

Appendix to: Landry ÉK, Djebbar F, Autmizguine J, Bérubé S, Lebel D, Litalien C. In-use variability of tacrolimus concentration in compounded suspension for transplanted pediatric patients [abstract]. *Can J Hosp Pharm.* 2023;76(2):152.

TABLE 1: Handling of bottles of tacrolimus 0,5 mg/mL compounded suspension¹ and analyses carried over time

Storage and handling conditions						Time Point	s of Analyses
Scenario/ Bottle (A)mber (C)lear	Temp. (°C)	Daylight Exposure	Vigorous agitation of bottle for 30 seconds	2 mL sampling ²	Amlodipine ³ Contamination	Microbial (3 mL sampling) ⁴	Tacrolimus HPLC Assay (2 mL sampling) ⁵
1 ⁶ /A	2-8		Х	D0, D56, D63, D70, D77, D84		D0, D56, D84	D0, D56, D63, D70, D77, D84
2/A	2-8		х	BID ⁷ from D0 to D28		D0, D28	D0,D7,D14,D21,D28
3/A	2-8			BID from D0 to D28		D0, D28	D0,D7,D14,D21,D28
4/A	2-8		x	BID from D0 to D28	х	D0, D28	D0,D7,D14,D21,D28
5/A	2-8			BID from D0 to D28	х	D0, D28	D0,D7,D14,D21,D28
6/A	20-25	х	x	BID from D0 to D28		D0, D28	D0,D7,D14,D21,D28
7/C	20-25	х	х	BID from D0 to D28		D0, D28	D0,D7,D14,D21,D28
8/A	-20			D0,D1			D0, D1
9/A	20-25		x ⁸	14 times on D0, D1, D2, D3 ⁹			D0, D1, D2, D3 ₁ , D3 ₂

D= Day, BID=twice daily, HPLC=High Performance Liquid Chromatography

¹150 mL in plastic bottles

²Samples taken from each bottle by first pouring the amount into a 30 mL measuring cup and then withdrawing 2 mL using a 3 mL syringe. Any remaining amount in the measuring cup was poured back in the bottle. The 2 mL sample was either used for the assay on pre-determined days or was safely discarded. ³1mL of amlodipine withdrawn in the syringe and put back in its bottle prior to tacrolimus sampling with the contaminated syringe.

⁴3 mL transferred into sterile container stored in refrigerator and analysed within 24 hours

⁵Two 1 mL aliquots transferred into two 5 mL cryovials and stored in a freezer at -80°C until analysis.

⁶Control bottle: Agitation twice daily, every day up to day 84

⁷One sample on D0, two samples from D1 to D28 taken less than 4 but no more than 12 hours apart;

⁸Bottle shaken 30 seconds on first sampling

⁹Until the bottom of the bottle is reached

Appendix to: Jain B, Sun C, Singh S, Bugaj V, DeAngelis C, Peragine C. Prescribing trends for antiestrogens, bicalutamide, traditional oral cytotoxic agents, and oral immunosuppressants at the Odette Cancer Centre between 2018 to 2022 [abstract]. *Can J Hosp Pharm.* 2023;76(2):154.

TABLE 1. Descriptive statistics and trends for new, unique, and total prescriptions for traditional oral anticancer medications							
	Total for	Average	Average	Average	Quarterly trend		
	study period (count)	per quarter (count)	per month (count)	per day (count)	(Δ count/quarter)	P-value	
TOTAL PRESCRIPTIONS							
Antiestrogens*	5715	336	112	3.7	-2.0	0.57	
Bicalutamide	1443	85	28	0.9	-2.7	0.01	
Traditional cytotoxics and/or immunosuppressants**	14 961	880	293	9.7	+7.9	0.03	
UNIQUE PRESCRIPTIONS							
Antiestrogens*	5697	335	112	3.7	-2.0	0.58	
Bicalutamide	1443	85	28	0.9	-2.7	0.01	
Traditional cytotoxics and/or immunosuppressants**	10 487	617	206	6.8	+3.7	0.08	
NEW STARTS							
Antiestrogens*	974	57	19	0.6	-1.6	0.24	
Bicalutamide	1 026	60	20	0.7	-2.3	0.01	
Traditional cytotoxics and/or immunosuppressants**	2 132	125	42	1.4	-1.4	0.04	

*Antiestrogen OAMs include anastrozole, exemestane, letrozole, and tamoxifen

** Traditional cytotoxics and/or immunosuppressants include capecitabine, chlorambucil, cyclophosphamide, cyclosporine, etoposide, fludarabine, hydroxyurea, isotretinoin, lomustine, mercaptopurine, methotrexate, midostaurin, mycophenolate, procarbazine, tacrolimus, temozolomide, and tretinoin

Appendix to: Chan J, Chan M. SGLT2 inhibitors, the blockbuster drug of the early 21st century [abstract]. *Can J Hosp Pharm*. 2023;76(2):156.

TABLE 1. SGLT2i trials in type 2 diabetes								
Trial (Medication)	Primary Outcome HR (95% CI) (P-value)	Key Summary						
EMPA-REG OUTCOME (empagliflozin 10 or 25 mg)	↓ MACE 0.86 (0.74 – 0.99) (P=0.04)	This was the first SGLT2i trial showing reduction of CV events.						
CANVAS Program (canagliflozin 100 or 300 mg)	↓ MACE 0.86 (0.75 – 0.97) (P=0.02)	Canagliflozin reduced CV events and HHF.						
DECLARE-TIMI 58 (dapagliflozin 10 mg)	↓ CV death or HHF 0.83 (0.73 – 0.95) (P=0.005)	Dapagliflozin lowers rate of CV death or HHF, but not MACE.						
VERTIS CV (ertugliflozin 5 or 15 mg)	MACE 0.97 (0.75 – 1.03) (P<0.001 for noninferiority)	Ertugliflozin is non-inferior to placebo in reducing MACE.						

CV = cardiovascular; eGFR = estimated glomerular filtration rate; HHF = heart failure hospitalization; MACE = major adverse cardiovascular event

TABLE 2. SGLT2i trials in cardiovascular disease						
Trial (Medication)	Primary Outcome HR (95% CI) (P-value)	Key Summary				
DAPA-HF (dapagliflozin 10 mg)	↓ worsening HF or CV death 0.74 (0.65 – 0.85) (P<0.001)	Dapagliflozin lowered the risk of worsening HF or CV death in HFrEF patients, regardless of diabetic status				
EMPEROR-Reduced (empagliflozin 10 mg)	\downarrow composite of CV death and HHF 0.75 (0.65 – 0.86) (P<0.001)	Empagliflozin shown to reduce CV death and HHF in HFrEF, regardless of diabetic status				
EMPEROR-Preserved (empagliflozin 10 mg)	↓ CV death or HHF 0.79 (0.69 – 0.90) (P<0.001)	Empagliflozin reduced CV death or HHF in HFpEF patients				
SOLOIST-WHF (sotagliflozin 200 or 400 mg)	↓ CV death and HHF 0.67 (0.52 – 0.85) (P<0.001)	This was the first large trial of SGLT1/SGLT2 inhibitor in hospitalized patients				
DELIVER (dapagliflozin 10 mg)	\downarrow CV death or worsening HF 0.82 (0.73 – 0.92) (P<0.001)	Patients with HF with mildly reduced or preserved ejection fraction. Dapagliflozin benefits extend to all HF patients.				

CV = cardiovascular; HF = heart failure; HHF = hospitalization heart failure; HFrEF = heart failure reduced ejection fraction; HFpEF = heart failure preserved ejection fraction

TABLE 3. SGLT2i trials in renal disease						
Trial (Medication)	Primary Outcome HR (95% CI) (P-value)	Key Summary				
CREDENCE (canagliflozin 100 mg)	\downarrow ESRD, doubling of sCr, renal death, or CV death 0.70 (0.59 – 0.82) (P=0.00001)	CREDENCE was the first trial showing GLD in improving kidney endpoints.				
DAPA-CKD (dapagliflozin 10 mg)	\downarrow Decline in eGFR, new ESRD, renal death, or CV death 0.61 (0.51 – 0.72) (P<0.001)	Dapagliflozin reduced the risk of eGFR decline, ESRD, and renal or CV death in CKD patients, regardless of diabetic status.				

CKD = chronic kidney disease; CV = cardiovascular; eGFR = estimated glomerular filtration rate;

ESRD = end stage renal disease; GLD = glucose lowering drug; sCr = serum creatinine

Appendix to: Jain B, Sun C, Singh S, Bugaj V, DeAngelis C, Peragine C. Trends in new and total prescriptions for oral anticancer medications at the Odette Cancer Centre: a 51-month retrospective study [abstract]. *Can J Hosp Pharm.* 2023;76(2):158.

TABLE 1. Descriptive statistics and trends for new, unique, and total prescriptions for oral anticancer medications						
	Total for	Average	Average	Average	Quarterly tr	end
	count)	per quarter (count)	per month (count)	per day (count)	(∆ count/quarter)	P-value
TOTAL PRESCRIPTIONS						
All OAM	60 387	3 552	1 184	39	+79.6	<0.001
Traditional * OAM	22 119	1 301	434	14	+3.2	0.3
Modern** OAM	38 268	2 251	750	25	+76.4	<0.001
UNIQUE PRESCRIPTIONS						
All OAM	46 644	2 744	915	30	+40.5	<0.001
Traditional * OAM	17 627	1 037	346	11	-1.0	0.75
Modern** OAM	29 017	1 707	569	19	+41.5	<0.001
NEW STARTS						
All OAM	6 978	410	137	5	-5.2	0.03
Traditional * OAM	4 132	243	81	3	-5.3	0.02
Modern** OAM	2 846	167	56	2	+0.2	0.82

*Tradional OAMs include Anastrozole, exemestane, letrozole, tamoxifen, bicaluatamide, capecitabine, chlorambucil, cyclophosphamide, cyclosporine, etoposide, fludarabine, hydroxyurea, isotretinoin, lomustine, mercaptopurine, methotrexate, midostaurin, mycophenolate, procarbazine, tacrolimus, temozolomide, tretinoin. **Modern OAMs include abemaciclib, abiraterone, acalabrutinib, afatinib, alectinib, alpelisib, apalutamide, axitinib, binimetinib, brigatinib, cabozantinib, capmatinib, cedazuridine/decitabine, cobimetinib, crizotinib, dabrafenib, darolutamide, dasatinib, eltrombopag, enasidenib, encorafenib, enzalutamide, erdafitinib, erlotinib, everolimus, gefitinib, gilteritinib, glasdegib, ibrutinib, idelalisib, imatinib, ixazomib, lapatinib, larotrectinib, lenalidomide, lenvatinib, lorlatinib, mobocertinib, neratinib, nilotinib, niraparib, olaparib, osimertinib, palbociclib, pazopanib, pomalidomide, pralsetinib, regorafenib, ribociclib, ruxolitinib, selinexor, selpercatinib, sorafenib, sotorasib, sunitinib, telotristat ethyl, trametinib, trifluridine/tipiracil, tucatinib, veliparib, vemurafenib, venetoclax, vismodegib, vorinostat, zanubrutinib Appendix to: Mourad M, Bertoldo L, Vinet J. Listen to your clinicians: collecting user input after smart pump implementation to drive continuous quality improvement [abstract]. *Can J Hosp Pharm*. 2023;76(2):161-2.

TABLE 1. Clinician Responses to Survey Questions								
Question*	Average Rating out of 5 <u>before</u> implementation (% agreement with the statement)	Average Rating out of 5 <u>after</u> implementation (% agreement with the statement)	Percent Difference					
I always use the pump drug library for IV infusions.	2.81 (56.2%)	4.10 (82%)	+25.8%					
It is easy for me to find the drugs I need in the pump drug library	3.15 (63%)	3.61 (72.2%)	+9.2%					
The pump's drug library supports safe patient infusions	3.47 (69.4%)	3.99 (79.8%)	+10.4%					
I understand the process to follow if a limit is reached within the drug library and how to communicate this if I would like the settings to be modified.	N/A	3.19 (63.8%)	N/A					

*Respondents were asked to rate their experience using a scale from 1 to 5 where 1 = completely disagree and 5 = completely agree

TABLE 2. Clinician Comments Grouped by Topic**							
Drug Library-related	Change Management/ Training-related	Pump Design-related					
 Revision of limits (including hard and soft limits) Adjusting air in line detection threshold Drug nomenclature modifications for easier/ more intuitive search Adding missing drugs or drug concentrations 	 Programming steps Adjustment of alarm volumes Management of alerts and alarms Pump cleaning after use 	 Interest in touch screen functionality More extensive memory of recently used drugs on the pump Interest in "standby" functionality 					

**Most commonly reported topics

Appendix to : Adams B, Sansom B, Doiron N, Doucette D, Gagnon J, Landry D, et al. The New Brunswick Pharmacy Assessment Clinic: a novel, hospital pharmacist-led collaborative practice hub [abstract]. *Can J Hosp Pharm.* 2023;76(2):163.



FIGURE 1. PAC Process Map.