

**Supplementary Table S1: Quality control results of drugs analyzed in DARU during the period 2016 - 2020**

	BODY SYSTEM/DRUG CLASS	NUMBER OF SAMPLES	COMPLIED LOCAL	COMPLIED IMPORTED	FAILED LOCAL	FAILED IMPORTED	TESTS FAILED
	<b>GASTROINTESTINAL SYSTEM</b>						
	<b>Antiulcer drugs</b>						
1.	Esomeprazole capsules	1		1			
2.	Esomeprazole injection	1		1			
3.	Esomeprazole tablets	1		1			
4.	Omeprazole capsules	1				1	D
5.	Pantoprazole, domperidone capsules	1	1				
	<b>Anti-emetics</b>						
6.	Metoclopramide syrup	1	1				
7.	Ondansetron syrup	1	1				
	<b>Spasmolytics</b>						
8.	Hyocine-N-butylbromide syrup	1		1			
	<b>CARDIOVASCULAR SYSTEM</b>						
	<b>Antihypertensives</b>						
9.	Atenolol tablets	1	1				
10.	Hydrochlorothiazide tablets	1	1				
11.	Nebivolol, hydrochlorothiazide tablets	1		1			
12.	Ramipril tablets	2	2				
13.	Telmisartan, cilnidipine tablets	1		1			

	BODY SYSTEM/DRUG CLASS	NUMBER OF SAMPLES	COMPLIED LOCAL	COMPLIED IMPORTED	FAILED LOCAL	FAILED IMPORTED	TESTS FAILED
14.	Telmisartan, cilnidipine, chlorthalidone tablets	1		1			
15.	Valsartan, amlodipine tablets	3		3			
	<b>Hypoglycemic agents</b>						
16.	Empagliflozin tablets	2		1		1	WU
17.	Sitagliptin tablets	2		2			
	<b>EYE PREPARATIONS</b>						
18.	Chloramphenicol eye drops	1		1			
19.	Latanoprost eye drops	1		1			
20.	Moxifloxacin, dexamethasone eye drops	2		2			
21.	Ofloxacin eye drops	1		1			
22.	Olopatadine eye drops	1		1			
23.	Prednisolone eye drops	2		2			
24.	Timolol eye drops	1		1			
	<b>ANTI-INFECTIVES</b>						
	<b>Antibacterials</b>						
25.	Amoxicillin capsules	3		3			
26.	Amoxicillin, flucloxacillin capsules	1		1			
27.	Ampicillin capsules	1		1			
28.	Azithromycin suspension	1		1			
29.	Cefadroxil capsules	1		1			

	BODY SYSTEM/DRUG CLASS	NUMBER OF SAMPLES	COMPLIED LOCAL	COMPLIED IMPORTED	FAILED LOCAL	FAILED IMPORTED	TESTS FAILED
30.	Cefadroxil tablets	1		1			
31.	Cefepime injection	1		1			
32.	Cefixime capsules	2		2			
33.	Cefixime suspension	1		1			
34.	Cefotaxime injection	2		2			
35.	Cefpodoxime suspension	1		1			
36.	Cefprozil suspension	2	2				
37.	Cefprozil tablets	2	2				
38.	Ceftazidime injection	2		2			
39.	Ceftriaxone injection	4		4			
40.	Cefuroxime injection	1		1			
41.	Cefuroxime suspension	3		3			
42.	Cefuroxime tablets	1	1				
43.	Cefuroxime, clavulanic acid suspension	1		1			
44.	Cephalexin capsules	3		3			
45.	Cephalexin suspension	1		1			
46.	Ciprofloxacin tablets	2		2			
47.	Co-amoxiclav suspension	6		6			
48.	Co-amoxiclav tablets	3		3			
49.	Colistin powder	2	2				
50.	Co-trimoxazole powder	1	1				

	BODY SYSTEM/DRUG CLASS	NUMBER OF SAMPLES	COMPLIED LOCAL	COMPLIED IMPORTED	FAILED LOCAL	FAILED IMPORTED	TESTS FAILED
51.	Co-trimoxazole suspension	1	1				
52.	Co-trimoxazole tablets	1		1			
53.	Erythromycin drug substance	10		10			
54.	Erythromycin suspension	22		22			
55.	Gentamicin injection	2		2			
56.	Levofloxacin injection	2		2			
57.	Levofloxacin tablets	1	1				
58.	Linezolid injection	1		1			
59.	Meropenem injection	4		4			
60.	Oxytetracycline injection	4		4			
61.	Oxytetracycline powder	2	2				
62.	Procaine penicillin, dihydrostreptomycin injection	1		1			
63.	Spiramycin injection	1		1			
64.	Tigecycline injection	1		1			
65.	Tylosin, doxycycline powder	1	1				
66.	Vancomycin injection	1		1			
	<b>Anthelmintics</b>						
67.	Albendazole bolus	1		1			
68.	Albendazole suspension	3	3				
69.	Albendazole, closantel suspension	1		1			

	BODY SYSTEM/DRUG CLASS	NUMBER OF SAMPLES	COMPLIED LOCAL	COMPLIED IMPORTED	FAILED LOCAL	FAILED IMPORTED	TESTS FAILED
70.	Ivermectin injection	5		5			
71.	Levamisole suspension	1	1				
72.	Levamisole, oxclozanide suspension	2	1	1			
73.	Levamisole, oxclozanide, cobalt sulphate suspension	1	1				
74.	Levamisole, triclabendazole suspension	3	3				
75.	<b>Antiprotozoals</b>						
	Aminosidine tablets	1	1				
76.	Amprolium powder	1		1			
77.	Buparvaquone injection	1		1			
78.	Diminazene granules injection	1		1			
79.	Metronidazole suspension	2	2				
80.	Nitazoxanide suspension	1		1			
81.	Nitazoxanide tablets	1	1				
82.	Secnidazole tablets	1		1			
	<b>Mixed antimicrobials</b>						
83.	Diloxanide furoate, metronidazole, dicyclomine suspension	1	1				
84.	Fluconazole, azithromycin, secnidazole tablets	1		1			
85.	Levofloxacin, ornidazole tablets	1		1			

	BODY SYSTEM/DRUG CLASS	NUMBER OF SAMPLES	COMPLIED LOCAL	COMPLIED IMPORTED	FAILED LOCAL	FAILED IMPORTED	TESTS FAILED
86.	Ofloxacin, ornidazole infusion	3	1	2			
87.	Tinidazole, lidocaine, tioconazole ovules	1		1			
	<b>Antimalarials</b>						
88.	Artemether injection	1		1			
89.	Artemether, lumefantrine suspension	1		1			
90.	Artesunate, mefloquine tablets	1		1			
91.	Quinine injection	1		1			
	<b>Antivirals</b>						
92.	Aciclovir cream	1		1			
93.	Aciclovir injection	1		1			
	<b>Antifungals</b>						
94.	Clotrimazole pessaries	1	1				
95.	Miconazole cream	1	1				
	<b>NERVOUS SYSTEM</b>						
	<b>Analgesics</b>						
96.	Aceclofenac, paracetamol tablets	1		1			
97.	Aceclofenac, paracetamol, tizanidine tablets	1	1				
98.	Aclofenac tablets	1		1			
99.	Aclofenac, paracetamol tablets	1		1			
100.	Chlorzoxazone, diclofenac, paracetamol tablets	1	1				

	BODY SYSTEM/DRUG CLASS	NUMBER OF SAMPLES	COMPLIED LOCAL	COMPLIED IMPORTED	FAILED LOCAL	FAILED IMPORTED	TESTS FAILED
101.	Diclofenac injection	1		1			
102.	Diclofenac tablets	1	1				
103.	Etoricoxib, thiocolchicoside tablets	1	1				
104.	Etoricoxib tablets	2		2			
105.	Ibuprofen, paracetamol suspension	1	1				
106.	Lornoxicam injection	1		1			
107.	Naproxen tablets	2		2			
108.	Paracetamol tablets	3		3			
109.	Paracetamol, caffeine tablets	1		1			
	<b>Anti-inflammatory agents</b>						
110.	Dexamethasone injection	1		1			
	<b>Opioid analgesics</b>						
111.	Butorphanol injection	2		2			
112.	Morphine injection	1		1			
113.	Morphine powder	3		3			
114.	Morphine solution	39	38		1		A
	<b>Anti-epileptics</b>						
115.	Pregabalin capsules	2	2				
	<b>Nootropics</b>						
116.	Citicoline injection	1		1			
	<b>Anesthetics</b>						

	BODY SYSTEM/DRUG CLASS	NUMBER OF SAMPLES	COMPLIED LOCAL	COMPLIED IMPORTED	FAILED LOCAL	FAILED IMPORTED	TESTS FAILED
117.	Bupivacaine injection	1		1			
118.	Propofol injection	2		2			
	<b>RESPIRATORY SYSTEM</b>						
119.	Carbocisteine syrup	2	2				
120.	Carbocisteine, promethazine syrup	1	1				
121.	Chlorpheniramine syrup	1	1				
122.	Chlorpheniramine tablets	2	2				
123.	Chlorpheniramine, pseudoephedrine, paracetamol syrup	1	1				
124.	Desloratadine syrup	1		1			
125.	Diphenhydramine, ammonium chloride, sodium citrate, menthol syrup	1	1				
126.	Diphenhydramine, sodium citrate, menthol syrup	1	1				
127.	Ephedrine nasal drops	2	2				
128.	Levosulbutamol inhalation respules	1		1			
129.	Loratadine syrup	1	1				
130.	Mometasone furoate nasal spray	1		1			
131.	Montelukast, fexofenadine tablets	2		2			
132.	Salbutamol syrup	1		1			
133.	Salbutamol, bromhexine, guaifenesin, menthol expectorant	1	1				



	BODY SYSTEM/DRUG CLASS	NUMBER OF SAMPLES	COMPLIED LOCAL	COMPLIED IMPORTED	FAILED LOCAL	FAILED IMPORTED	TESTS FAILED
134.	Sodium chloride nasal drops	1	1				
	<b>GENITOURINARY SYSTEM</b>						
	<b>Erectile Dysfunction drugs</b>						
135.	Sildenafil tablets	5	3	2			
	<b>Anti-BPH drugs</b>						
136.	Tamsulosin, dutasteride tablets	1		1			
	<b>Uterotonics</b>						
137.	Carbetocin injection	1		1			
138.	Mifepristone, misoprostol tablets	1		1			
	<b>Uricosurics</b>						
139.	Febuxostat tablets	2	2				
	<b>Osmotic diuretics</b>						
140.	Mannitol injection	1		1			
	<b>ANTICANCER AGENTS</b>						
141.	Bendamustine injection	1		1			
142.	Gemcitabine injection	1		1			
143.	Paclitaxel injection	3		3			
144.	Pemetrexed injection	2		2			
145.	Trastuzumab injection	2		2			
	<b>NUTRITIONAL PRODUCTS</b>						
	<b>Nutrient mixtures</b>						

	BODY SYSTEM/DRUG CLASS	NUMBER OF SAMPLES	COMPLIED LOCAL	COMPLIED IMPORTED	FAILED LOCAL	FAILED IMPORTED	TESTS FAILED
146.	Ferric ammonium citrate, folic acid, cyanocobalamin, ethanol syrup	1		1			
147.	Ferric ammonium citrate, vitamin B12, folic acid, zinc sulphate capsules	1		1			
148.	Ferrous fumarate, folic acid, cyanocobalamin, ascorbic acid, zinc sulphate capsules	1		1			
	<b>Vitamins</b>						
149.	Folate calcium injection	1		1			
150.	Thiamine, riboflavin, pyridoxine, cyanocobalamin, nicotinamide, calcium pantothenate tablets	1		1			
151.	Vitamin A, vitamin D3, vitamin E, vitamin B1, vitamin B2, vitamin B6 3 mg, nicotinamide, pantothenol, vitamin B12 injection	2		2			
	<b>Minerals</b>						
152.	Iron dextran injection	1		1			
	<b>Electrolytes</b>						
153.	Glucose, sodium chloride injection	1		1			
154.	Sodium lactate, sodium chloride, potassium chloride, calcium chloride injection	1		1			
	<b>SKIN PREPARATIONS</b>						
155.	Beclomethasone lotion	1		1			

	BODY SYSTEM/DRUG CLASS	NUMBER OF SAMPLES	COMPLIED LOCAL	COMPLIED IMPORTED	FAILED LOCAL	FAILED IMPORTED	TESTS FAILED
156.	Betamethasone, gentamicin, clotrimazole cream	1		1			
157.	Betamethasone, miconazole, neomycin cream	1		1			
158.	Eberconazole cream	1		1			
159.	Fusidic acid cream	1		1			
160.	Hydroquinone, tretinoin, allantoin cream	1		1			
161.	Ketoconazole shampoo	1		1			
162.	Mometasone furoate, fusidic acid cream	1		1			
163.	Mometasone ointment	1		1			
164.	Silver sulfadiazine, chlorhexidine gluconate cream	1		1			
	<b>MISCELLANEOUS PRODUCTS</b>						
	<b>Immunomodulatory agents</b>						
165.	Adalimumab injection	1		1			
166.	Rituximab injection	2		2			
167.	Tacrolimus capsules	1		1			
	<b>Excipients</b>						
168.	Capsule shells	*5					
169.	Petrolatum	1		1			
	<b>Antiseptics &amp; disinfectants</b>						
170.	Benzalkonium chloride solution	1	1				

	BODY SYSTEM/DRUG CLASS	NUMBER OF SAMPLES	COMPLIED LOCAL	COMPLIED IMPORTED	FAILED LOCAL	FAILED IMPORTED	TESTS FAILED
171.	Chlorhexidine digluconate gel	1	1				
172.	Iodine tincture	1			1		A
173.	Povidone iodine solution	1	1				
174.	Isopropyl alcohol	*1					I, A
	<b>Herbal products</b>						
175.	Adhatoda vasila, Glycyrrhiza glabra, Viola Odorata, Solanum xanthocarpum, Zingiber officinale, Curcuma longa, Elettaria cardamomum, Piper longum, Syzygium aromaticum, Cinnamomum verum, Mentha piperita syrup	1		1			
176.	Raspberry, Solomonseal Rhizome, Common Yam Rhizome, Cortex cinnamon, Barbary wolfberry fruit capsules	1				1	Tadalafil (adulteration)
	<b>Vaccines</b>						
177.	Diphtheria toxoid, tetanus toxoid, B. pertussis injection	3		3			
	<b>Total</b>	<b>326</b>	<b>104</b>	<b>211</b>	<b>2</b>	<b>3</b>	

A – assay, BPH – benign prostate hyperplasia, D – dissolution, I – identification, WU – weight uniformity, \*Includes samples of undeclared origin.