

# THE LANCET

## **Supplementary webappendix**

This webappendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: DART Trial Team. Routine versus clinically driven laboratory monitoring of HIV antiretroviral therapy in Africa (DART): a randomised non-inferiority trial. *Lancet* 2009; published online Dec 9. DOI:10.1016/S0140-6736(09)62067-5.

**WebTable 1 Routine laboratory tests for toxicity**

	Haematology panel (haemoglobin, white cell count, neutrophils, platelets)				Biochemistry panel (urea, bilirubin, creatinine, ALT/AST)			
	CDM		LCM		CDM		LCM	
Total number of tests performed	138244		142187		159026		161206	
N (%) at extra patient initiated visits	8955	(6.5%)	10501	(7.4%)	7183	(4.5%)	7028	(4.4%)
N (%) released in CDM	4973	(3.6%)			3887	(2.4%)		
- requested by clinician	4019	(2.9%)	-		3812	(2.4%)	-	
- returned per protocol*	954**	(0.7%)			75	(0.05%)		
Total number of participants	1660		1656		1660		1656	
One or more extra patient initiated visit with test	812	(49%)	965	(58%)	639	(38%)	683	(41%)
			p<0.0001				p=0.11	
- # visits (median, IQR)	2	(1-4)	2	(1-4)	2	(1-4)	2	(1-3)
			p=0.94				p=0.55	

\* Grade 4 test result not already requested by clinician

\*\* mostly (n=743) Grade 4 neutrophils ( $<0.5 \times 10^9/l$ ) which were not acted on. Also 115 grade 4 haemoglobins in 88 patients (28 died). 60/115 (52%) occurred before 24 weeks, and 23/115 (20%) were immediately preceded by a haemoglobin result requested by the CDM clinician.

Note: CDM clinicians could request one or more of the individual tests in a panel at extra visits.

**WebTable 2 Serious Adverse Events**

Category and details of event	CDM	LCM	Total
<b>Total</b>	<b>35</b>	<b>305</b>	<b>650</b>
<b>Biochemical: Total</b>	<b>3</b>		<b>3</b>
Hyperglycaemia	1		1
Hypokalaemia	1		1
Raised liver enzymes	1		1
<b>CNS: Total</b>	<b>19</b>	<b>10</b>	<b>29</b>
Cranial nerve lesion+Jaundice+Epilepsy, fits, convulsions	1		1
Dizziness	1		1
Epilepsy, fits, convulsions	4	5	9
Epilepsy, fits, convulsions+Acute altered conscious level	1		1
Epilepsy, fits, convulsions+Acute focal neurological event without fever	1		1
Headache+Acute altered conscious level	1		1
Hemiparesis		1	1
Other CNS disease		1	1
Parathesia, transient numbness, tingling+Diabetes - Type I+Metabolic disorder - other		1	1
Peripheral neuropathy - sensory & motor	2		2
Peripheral neuropathy - sensory only	2		2
Stroke, cerebrovascular accident	5	2	7
Stroke, cerebrovascular accident+Raised liver enzymes	1		1
<b>Cardiovascular: Total</b>	<b>30</b>	<b>22</b>	<b>52</b>
Cardiomyopathy	5	7	12
Cardiomyopathy+Congestive cardiac failure	1		1
Chest pain	1		1
Congestive cardiac failure	9	3	12
Deep vein thrombosis	10	9	19
Deep vein thrombosis+Gangrene		1	1
Hypotension/shock/toxic shock	1		1
Other cardiovascular	1		1
Pericarditis not TB or bacterial or no cause identified+Congestive cardiac failure		1	1
Pulmonary embolism+Deep vein thrombosis	1	1	2
Pulmonary hypertension+Cardiomyopathy	1		1
<b>Congenital abnormality: Total</b>	<b>4</b>	<b>4</b>	<b>8</b>
Club foot	1	3	4
Hydrocephalus, congenital intersusception bowel	1		1
Other cardiovascular		1	1
Prematurity	2		2
<b>Endocrine: Total</b>	<b>7</b>	<b>5</b>	<b>12</b>
Diabetes - Type I		3	3
Diabetes - Type II	7	1	8
Hypothyroidism		1	1
<b>Eye: Total</b>	<b>2</b>	<b>1</b>	<b>3</b>
Conjunctival squamous cell carcinoma	2		2
Glaucoma		1	1
<b>Gastrointestinal: Total</b>	<b>17</b>	<b>16</b>	<b>33</b>
Abdominal or epigastric pain		4	4
Acute diarrhoea no pathogen, idiopathic AIDS enteropathy	1		1
Anorexia, loss of appetite+Depression		1	1
Appendicitis		2	2
Chronic diarrhoea not investigated+Vomiting		1	1
Gall stones, cholecystitis, cholelithiasis+Hepatitis B	1		1
Haematemesis	1		2
Haematemesis+Peptic/gastric/duodenal ulcer		1	1
Indigestion, oesophageal reflux, gastritis, ulcerative oesophagitis	2	1	3
Intestinal obstruction	2		2
Pancreatitis	6	2	8
Paralytic ileus, ileitis	1	1	2
Peptic/gastric/duodenal ulcer	2	2	4
Vomiting	1		1
<b>Genitourinary: Total</b>	<b>2</b>	<b>1</b>	<b>3</b>
Orchitis		1	1
Puerperal sepsis	1		1
Urinary retention	1		1
<b>Haematological: Total</b>	<b>95</b>	<b>78</b>	<b>173</b>
Anaemia	66	59	125
Anaemia+Congestive cardiac failure		1	1
Anaemia+Enlarged spleen, splenomegaly	1		1
Anaemia+Hypertension	1		1
Anaemia+Leucopenia	1		1
Anaemia+Neutropenia	2		2
Anaemia+P falciparum malaria	1		1
Anaemia+Pancytopenia, bone marrow depression	1		1
Anaemia+Renal failure - acute	1		1
Anaemia+Thrombocytopenia	1		1

Category and details of event	CDM	LCM	Total
Anaemia+Thrombocytopenia+Neutropenia		1	1
Neutropenia	8	11	19
Neutropenia+Leucopenia	1		1
Neutropenia+Thrombocytopenia	1		1
Nose bleed, epistaxis	1	1	2
P falciparum malaria+Anaemia	1		1
Pancytopenia, bone marrow depression	8	4	12
Pancytopenia, bone marrow depression+Acute diarrhoea no pathogen		1	1
<b>Hepatic: Total</b>	<b>18</b>	<b>23</b>	<b>41</b>
Acute hepatitis	5	5	10
Acute hepatitis+Renal failure - acute	1		1
Cirrhosis	1		1
Hepatic failure	1	4	5
Hepatic steatosis	1		1
Hepatic steatosis+Cardiomyopathy	1		1
Hepatitis B		1	1
Hepatitis cause unknown	1	1	2
Hepatocellular carcinoma	1	1	2
Jaundice		1	1
Jaundice+Raised liver enzymes		1	1
Lactic acidosis	6	7	13
Lactic acidosis+Peripheral neuropathy - sensory & motor		1	1
Recurrent fever - no diagnosis+Acute hepatitis		1	1
<b>Lower respiratory tract: Total</b>	<b>5</b>	<b>2</b>	<b>7</b>
Broncho-oesophageal fistula	1		1
Bronchospasm/Asthma	1		1
Pneumonia no organism identified, aspiration pneumonia	1	1	2
Pulmonary embolism	2	1	3
<b>Musculoskeletal: Total</b>	<b>25</b>	<b>22</b>	<b>47</b>
Arthralgia, arthritis, pain in joints, arthropathies	2	3	5
Bone fracture	20	16	36
Bone fracture+Osteoporosis	1		1
Disc prolapse, slipped disc		2	2
Myalgia, pain in muscles	1		1
Myopathy, muscle wasting	1		1
Pyomyositis - infection		1	1
<b>Non HIV related deaths: Total</b>	<b>3</b>	<b>7</b>	<b>10</b>
Alcohol related		2	2
Obstetric	1	1	2
Suicide	1		1
Traumatic	1	4	5
<b>Other: Total</b>	<b>26</b>	<b>14</b>	<b>40</b>
Death, cause unknown	15	10	25
Hysterectomy	1		1
Non-fatal trauma	10	4	14
<b>Pregnancy associated: Total</b>	<b>3</b>	<b>5</b>	<b>8</b>
Ectopic pregnancy		2	2
Other gram positive sepsis+Spontaneous abortion (complete or incomplete)		1	1
Septic abortion	1		1
Spontaneous abortion (complete or incomplete)	2	1	3
Still birth		1	1
<b>Psychiatric: Total</b>	<b>8</b>	<b>5</b>	<b>13</b>
Parasuicide (suicide attempt)	2	1	3
Psychosis, mania	6	4	10
<b>Renal: Total</b>	<b>8</b>	<b>12</b>	<b>20</b>
Glomerulonephritis		1	1
Haematuria		1	1
Renal failure - acute	5	8	13
Renal failure - acute+Pancytopenia, bone marrow depression	1		1
Renal failure - chronic	2	1	3
Renal failure - chronic+Congestive cardiac failure		1	1
<b>Skin: Total</b>	<b>41</b>	<b>46</b>	<b>87</b>
Burns	1	1	2
Hypersensitivity reaction	22	18	40
Hypersensitivity reaction+Acute hepatitis		1	1
Itching, pruritis, excoriation, scratching		1	1
Rash, erythematous	2	3	5
Rash, maculopapular	12	12	24
Rash, urticaria		4	4
Snake bite	1		1
Stevens-Johnson Syndrome	3	6	9
<b>Specific Infections: Total</b>	<b>22</b>	<b>9</b>	<b>31</b>
Cholera	2	1	3
Leprosy	1		1
P falciparum malaria	18	7	25
Presumed septicaemia/bacteremia - not investigated	1	1	2

<b>Category and details of event</b>	<b>CDM</b>	<b>LCM</b>	<b>Total</b>
<b>Systemic: Total</b>		<b>4</b>	<b>4</b>
Acute febrile episode - undiagnosed		3	3
Malnutrition		1	1
<b>Tumours: Total</b>	<b>7</b>	<b>19</b>	<b>26</b>
Cervical carcinoma	1	12	13
Other Solid tumour	6	7	13