

## Appendix 2

Supporting Information from HemoCoV STUDY available online – Full Data

### **COVID-19-associated Coagulopathy Characterization using Rotational Thromboelastometry in a Prospective, Non-Interventive study – HemoCoV Study**

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Content: 1 table.

Variable	Reference values	Admission (n=145)	ICU 5 days (n=125)	ICU 10 days (n=90)	ICU 15 days (n=70)	ICU 20 days (n=53)	ICU 25 days (n=42)	ICU 30 days (n=35)	Discharge (n=145)	p-value (admission vs. discharge)
Hemoglobin (g/dl)	12.5-17.5	12.7 [11.4-14.0]	11.5 [10.3-12.9]	10.5 [9.0-11.9]	9.2 [8.2-10.6]	8.4 [7.8-9.9]	8.3 [7.8-9.1]	8.5 [8.1-9.0]	10.4 [8.5-12.4]	<0.001
HTC (%)	40-50	37.4 [33.9-41.1]	34.4 [31.5-38.7]	31.2 [27.1-35.4]	27.1 [24.6-31.4]	25.2 [23.5-28.3]	25.1 [23.3-27.4]	25.3 [24.4-27.0]	30.8 [26.2-36.3]	<0.001
Platelets (x 10 <sup>9</sup> /L)	150-450	249.0 [187.0-330.0]	293.0 [218.0-360.0]	289.0 [191.0-366.0]	254.5 [151.3-327.8]	219.0 [143.0-299.0]	231.5 [171.3-296.5]	254.0 [172.5-317.5]	299.0 [206.0-379.0]	<0.001
Leucocytes (x 10 <sup>9</sup> /L)	4-11.000	10.0 [7.2-12.9]	11.2 [8.3-13.9]	15.3 [11.2-19.9]	12.6 [10.5-17.0]	12.9 [9.1-16.0]	11.2 [8.3-15.4]	12.6 [10.2-16.7]	11.9 [8.7-14.8]	<0.001
Neutrophils (x 10 <sup>6</sup> /L)		8.6 [5.9-11.9]	9.2 [6.8-12.3]	12.7 [9.0-17.7]	11.1 [7.7-15.1]	11.0 [7.9-14.4]	9.3 [6.9-13.7]	10.7 [7.7-14.5]	8.9 [6.4-12.8]	0.06
Plat/Neutrophils Ratio		28.6 [20.1-39.7]	31.3 [18.7-42.2]	23.1 [13.7-32.8]	25.3 [13.3-38.7]	23.2 [13.7-33.7]	26.2 [12.4-37.8]	20.9 [13.5-39.6]	35.0 [18.5-50.9]	0.05
Lymphocytes (x 10 <sup>6</sup> /L)		0.6 [0.4-0.9]	0.8 [0.5-1.1]	0.9 [0.5-1.4]	0.9 [0.6-1.5]	0.9 [0.6-1.5]	0.9 [0.7-1.5]	1.3 [0.8-1.7]	1.1 [0.7-1.7]	<0.001
LDH (U/L)	100-250	528.0 [395.0-664.0]	410.0 [336.0-546.0]	407.0 [309.5-510.8]	359.5 [286.0-509.0]	366.0 [288.0-477.0]	376.0 [289.0-504.0]	425.0 [312.5-544.0]	352.0 [283.0-433.0]	<0.001
CRP (mg/dl)	<0.5	13.3 [8.5-21.0]	8.9 [3.9-15.8]	8.7 [3.6-14.3]	9.3 [4.1-15.9]	5.5 [2.7-11.6]	6.9 [3.6-10.7]	4.8 [2.3-7.3]	4.2 [1.6-11.3]	<0.001
PCT (ng/ml)	<0.5	0.4 [0.2-0.9]	0.3 [0.2-0.6]	0.3 [0.2-0.6]	0.4 [0.2-0.9]	0.3 [0.2-0.6]	0.3 [0.2-0.7]	0.3 [0.2-0.6]	0.2 [0.1-0.6]	0.001
Ionized Calcium (mg/dl)	8.6-10.2	1.14 [1.1-1.2]	1.16 [1.13-1.20]	1.18 [1.14-1.22]	1.18 [1.15-1.22]	1.17 [1.12-1.21]	1.16 [1.13-1.20]	1.14 [1.12-1.19]	1.17 [1.14-1.20]	<0.001
Creatinine (mg/dl)	0.7-1.20	0.9 [0.7-1.2]	0.7 [0.6-0.9]	0.7 [0.5-0.9]	0.6 [0.5-0.9]	0.5 [0.4-0.9]	0.5 [0.4-0.8]	0.5 [0.4-0.7]	0.7 [0.5-0.9]	<0.001
Urea (mg/dl)	16-49	55.0 [39.0-77.0]	59.0 [44.0-82.0]	68.5 [49.0-100.5]	59.0 [45.3-89.0]	57.0 [43.0-85.0]	56.0 [40.3-88.8]	56.0 [48.5-97.0]	46.5 [36.0-76.3]	0.40
GFR (ml/min)	>60	85.5 [57.0-99.3]	98.0 [80.0-107.0]	99.5 [79.0-112.0]	105.0 [84.0-121.8]	106.0 [84.0-123.0]	108.5 [87.5-127.0]	114.0 [96.0-132.5]	100.0 [78.0-114.0]	<0.001
AST (U/L)	0-40	44.0 [33.0-57.0]	36.5 [27.0-62.3]	37.0 [23.0-49.3]	31.5 [22.0-44.8]	28.5 [21.0-40.8]	24.5 [17.3-38.5]	27.0 [20.0-41.0]	24.0 [17.0-42.0]	<0.001
ALT (U/L)	0-41	36.0 [25.0-57.0]	44.0 [31.8-73.0]	49.0 [33.5-84.0]	46.0 [31.0-68.0]	46.5 [26.8-64.8]	41.0 [22.3-65.0]	49.0 [25.0-76.5]	40.0 [25.0-67.0]	0.03
Albumin (g/dl)	3.5-5.2	3.1 [2.8-3.4]	2.7 [2.4-3.0]	2.5 [2.2-2.8]	2.4 [2.2-2.7]	2.4 [2.2-2.7]	2.4 [2.1-2.5]	2.5 [2.4-2.6]	2.9 [2.6-3.2]	<0.001
Total Bilirubin (mg/dl)	<1.2	0.4 [0.3-0.7]	0.5 [0.3-0.6]	0.4 [0.3-0.6]	0.5 [0.3-0.7]	0.5 [0.3-0.8]	0.4 [0.2-0.5]	0.4 [0.3-0.5]	0.5 [0.3-0.6]	0.67
Troponin (ng/L)	<14	13.0 [8.0-31.0]	13.0 [6.3-24.0]	14.0 [8.0-27.0]	19.5 [11.0-31.0]	22.5 [13.3-38.8]	20.0 [11.5-47.5]	22.0 [18.0-52.5]	20.0 [8.0-39.5]	0.001

Variable	Reference values	Admission (n=145)	ICU 5 days (n=125)	ICU 10 days (n=90)	ICU 15 days (n=70)	ICU 20 days (n=53)	ICU 25 days (n=42)	ICU 30 days (n=35)	Discharge (n=145)	p-value (admission vs. discharge)
D-dimers (ug/ml)	<0.5	1.98 [0.81-5.46]	2.11 [1.25-5.78]	2.13 [1.24-5.08]	2.08 [1.30-11.19]	2.32 [1.34-5.14]	2.52 [1.38-12.98]	2.01 [1.38-8.19]	1.83 [0.94-4.72]	0.3278
INR		1.19 [1.11-1.28]	1.19 [1.12-1.28]	1.21 [1.13-1.30]	1.19 [1.14-1.29]	1.22 [1.13-1.30]	1.21 [1.15-1.27]	1.23 [1.17-1.28]	1.21 [1.13-1.33]	0.05
aPTT (sec)		0.94 [0.89-1.00]	0.94 [0.89-1.06]	0.96 [0.90-1.14]	1.01 [0.90-1.19]	1.01 [0.88-1.17]	0.93 [0.86-1.26]	0.97 [0.86-1.25]	0.97 [0.88-1.10]	<b>0.002</b>
Fibrinogen (mg/dL)	200-400	602.00 [487.00-722.00]	551.50 [427.75-718.25]	607.00 [455.00-772.50]	620.00 [445.50-759.50]	534.00 [336.00-699.00]	483.00 [386.00-621.00]	400.00 [256.50-509.50]	470.50 [362.00-603.75]	<b>&lt;0.001</b>
IL-6 (pg/ml)	<40	54.80 [16.30-96.00]	32.20 [12.40-83.98]	41.65 [12.08-131.90]	30.20 [15.20-83.78]	36.90 [15.08-61.08]	19.00 [10.95-77.60]	19.15 [14.30-39.38]	11.20 [6.00-20.20]	<b>0.0002</b>
Ferritin (ng/dl)	30-400	1194.00 [688.00-1776.00]	1211.00 [723.50-1814.50]	1018.00 [752.25-1586.25]	1100.00 [688.25-1728.50]	890.50 [55.30-1196.25]	761.50 [505.00-1110.50]	608.00 [406.00-919.50]	872.50 [546.25-1236.50]	<b>&lt;0.001</b>
FVIII (%)	50-150	232.50 [190.50-277.75]	263.00 [239.00-303.00]	279.00 [250.00-333.00]	277.00 [246.50-325.25]	272.50 [220.75-347.00]	307.00 [250.00-339.00]	256.00 [221.00-303.00]	280.00 [250.00-340.50]	<b>&lt;0.001</b>
vWF:Ag (%)	O: 42-140 Non-O: 66-176	264.00 [237.50-501.75]	418.50 [237.75-542.50]	499.00 [250.00-645.50]	462.00 [233.75-694.50]	460.00 [241.25-746.75]	523.00 [378.00-721.00]	498.00 [233.00-658.00]	250.00 [237.50-535.00]	0.643
vWF:Rco (%)	O: 48-201 Non-O: 60-239	345.00 [250.00-441.00]	376.00 [279.00-444.00]	395.00 [274.50-496.50]	372.00 [340.00-490.00]	437.50 [363.50-530.75]	458.00 [339.00-499.25]	396.00 [331.00-498.00]	351.52 [250.00-425.75]	0.465
Antithrombin (%)	80-120	101.00 [81.00-110.00]	105.00 [92.50-112.50]	101.00 [87.50-116.50]	97.00 [79.75-108.75]	104.00 [77.00-122.00]	107.00 [92.75-115.75]	107.00 [90.25-131.25]	104.50 [91.00-116.25]	<b>0.0003</b>
<b>EXTEM</b>										
CFT (sec)	34-159	56.00 [44.00-70.00]	53.00 [44.00-67.00]	51.00 [44.00-64.00]	60.00 [49.00-83.25]	57.00 [45.00-85.00]	62.00 [52.00-81.75]	59.50 [47.00-91.00]	57.50 [48.00-65.50]	<b>0.002</b>
A5 (mm)	34-55	54.00 [48.00-60.00]	57.00 [50.00-62.00]	57.00 [50.00-63.00]	54.00 [42.50-61.00]	56.00 [[43.00-61.00]	53.00 [43.00-58.00]	52.00 [41.50-58.25]	58.00 [50.00-62.00]	0.392
A10 (mm)	43-65	64.00 [59.00-69.00]	66.00 [60.00-70.50]	66.00 [60.00-71.00]	63.50 [54.75-70.00]	66.00 [54.00-70.00]	62.50 [54.00-67.25]	62.50 [51.00-65.75]	66.50 [60.00-70.00]	0.514
MCF (mm)	50-72	70.00 [66.00-73.00]	71.00 [67.00-75.00]	72.00 [68.00-76.00]	70.00 [65.75-75.00]	73.00 [61.00-75.00]	68.00 [61.50-72.00]	69.00 [60.00-73.25]	72.00 [67.00-74.00]	0.196
LI30 (%)		100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	0.237
LI60 (%)		94.00 [92.00-97.00]	96.00 [94.00-98.00]	98.00 [96.00-99.00]	98.00 [96.00-99.00]	98.00 [96.00-99.00]	98.00 [96.00-99.00]	98.00 [95.00-98.00]	96.00 [94.00-98.00]	<b>&lt;0.001</b>
ML (%)		10.00 [7.00-13.00]	7.00 [4.00-10.00]	5.00 [3.00-8.00]	4.00 [2.00-6.00]	5.00 [2.00-7.00]	5.50 [3.00-7.75]	5.00 [1.00-33.00]	7.00 [5.00-9.00]	<b>&lt;0.001</b>
<b>INTEM</b>										
CFT (sec)	30-110	54 [44.75-63.25]	52.00 [44.50-65.00]	55.00 [42.00-67.00]	59.50 [48.00-83.50]	56.00 [45.00-86.00]	68.00 [49.50-97.00]	63.50 [45.00-88.75]	54.00 [44.00-67.00]	0.232
A5 (mm)	38-57	53.00 [49.00-59.00]	55.00 [49.00-59.50]	55.00 [49.00-62.00]	52.00 [43.50-59.00]	54.00 [43.50-61.25]	51.00 [40.00-55.00]	50.00 [41.25-57.25]	55.00 [49.50-59.00]	0.932

Variable	Reference values	Admission (n=145)	ICU 5 days (n=125)	ICU 10 days (n=90)	ICU 15 days (n=70)	ICU 20 days (n=53)	ICU 25 days (n=42)	ICU 30 days (n=35)	Discharge (n=145)	p-value (admission vs. discharge)
A10 (mm)	44-66	62.50 [58.75-68.00]	64.00 [59.00-68.00]	65.00 [60.00-70.00]	61.50 [54.00-68.00]	64.00 [53.00-70.00]	59.50 [50.50-64.00]	59.50 [50.75-65.00]	64.00 [59.00-68.00]	0.933
MCF (mm)	50-72	68.00 [63.75-72.00]	69.00 [65.00-73.00]	71.00 [67.00-76.00]	70.00 [64.75-74.25]	72.00 [62.00-77.00]	67.00 [61.50-71.75]	66.00 [61.00-73.25]	70.00 [64.00-73.00]	0.147
LI30 (%)		100.00 [99.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	<b>&lt;0.001</b>
LI60 (%)		93.00 [90.00-97.00]	97.00 [94.00-98.00]	98.00 [97.00-100.00]	99.00 [97.00-100.00]	99.00 [98.00-100.00]	99.00 [97.00-100.00]	99.00 [98.00-100.00]	96.00 [94.00-99.00]	<b>&lt;0.001</b>
ML (%)		10.00 [6.00-13.25]	6.00 [3.00-9.00]	3.00 [1.00-5.00]	2.50 [1.00-5.00]	2.00 [1.00-5.00]	2.50 [1.00-4.00]	3.00 [1.00-5.00]	6.00 [3.00-9.00]	<b>&lt;0.001</b>
<b>FIBTEM</b>										
CFT (sec)		70.00 [54.00-109.00]	68.00 [47.00-126.00]	67.00 [50.00-105.00]	70.00 [52.00-96.00]	84.50 [54.25-379.25]	68.00 [51.75-142.00]	83.50 [61.75-177.50]	77.00 [54.75-114.50]	0.06
A5 (mm)	4-17	28.00 [25.00-33.00]	30.00 [23.25-34.00]	29.00 [24.00-33.00]	28.00 [24.25-32.00]	26.50 [18.25-32.00]	26.00 [18.75-29.00]	28.00 [16.50-30.00]	23.00 [22.75-32.25]	<b>0.003</b>
A10 (mm)	7-23	31.00 [27.00-36.00]	32.50 [26.00-37.00]	32.00 [27.25-37.00]	31.00 [27.00-35.00]	28.00 [20.50-34.50]	28.00 [21.00-31.00]	25.00 [17.75-33.25]	31.00 [25.00-35.00]	<b>0.04</b>
MCF (mm)	9-25	34.00 [30.00-39.00]	35.00 [28.00-39.75]	35.00 [29.25-41.00]	34.00 [30.00-38.00]	30.00 [23.00-37.50]	31.00 [24.00-35.00]	26.50 [19.00-36.00]	33.00 [26.00-38.00]	<b>0.02</b>
LI30 (%)		100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [99.00-100.00]	100.00 [100.00-100.00]	0.09
LI60 (%)		100.00 [98.00-100.00]	100.00 [99.00-100.00]	100.00 [99.00-100.00]	100.00 [100.00-100.00]	100.00 [99.00-100.00]	100.00 [98.00-100.00]	100.00 [94.00-100.00]	100.00 [98.25-100.00]	0.244
ML (%)		1.00 [0.00-3.00]	0.00 [0.00-2.75]	0.50 [0.00-3.00]	0.00 [0.00-1.00]	0.00 [0.00-2.00]	0.00 [0.00-4.50]	1.00 [0.00-7.00]	0.00 [0.00-4.00]	0.548
<b>HEPTEM</b>										
CFT (sec)		59.00 [47.00-71.00]	58.00 [47.00-67.00]	54.00 [47.00-76.00]	62.00 [51.00-85.75]	59.00 [46.00-98.00]	61.00 [49.25-88.75]	68.00 [51.00-93.00]	55.00 [47.00-70.00]	0.704
A5 (mm)		51.00 [47.00-57.50]	52.00 [46.25-58.00]	55.00 [47.00-60.00]	51.00 [42.00-58.50]	52.00 [40.00-59.50]	49.00 [41.00-56.75]	48.00 [39.00-55.00]	55.00 [47.75-60.00]	0.278
A10 (mm)		61.00 [57.00-66.00]	61.00 [56.00-66.75]	64.00 [57.00-68.00]	59.50 [51.50-65.00]	62.50 [50.00-68.25]	59.00 [52.00-66.00]	57.00 [50.00-63.00]	64.00 [56.00-68.00]	0.464
MCF (mm)		66.00 [62.00-70.00]	66.00 [63.00-72.00]	69.00 [65.00-74.00]	67.50 [62.00-72.50]	69.00 [59.50-75.00]	68.00 [61.00-74.00]	64.00 [59.50-71.00]	68.00 [63.00-72.00]	0.179
LI30 (%)		100.00 [99.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [100.00-100.00]	100.00 [99.00-100.00]	<b>0.001</b>
LI60 (%)		93.00 [90.00-97.00]	96.00 [94.00-98.00]	98.00 [97.00-99.00]	99.00 [97.00-100.00]	99.00 [97.00-100.00]	99.00 [97.00-100.00]	99.00 [97.00-99.50]	96.00 [94.00-98.00]	<b>&lt;0.001</b>
ML (%)		11.00 [6.00-14.00]	6.00 [3.00-9.00]	4.00 [2.00-6.00]	3.00 [1.50-5.00]	2.50 [1.00-5.00]	3.00 [1.00-6.00]	3.00 [1.25-5.00]	6.00 [3.00-9.00]	<b>&lt;0.001</b>

Variable	Reference values	Admission (n=145)	ICU 5 days (n=125)	ICU 10 days (n=90)	ICU 15 days (n=70)	ICU 20 days (n=53)	ICU 25 days (n=42)	ICU 30 days (n=35)	Discharge (n=145)	p-value (admission vs. discharge)
<b>Severity</b>										
SOFA score		4.00 [2.00-7.00]	4.00 [2.00-6.00]	4.00 [3.00-7.00]	5.00 [4.00-7.00]	6.00 [4.00-8.00]	5.00 [4.00-8.00]	4.00 [3.00-7.00]	3.00 [2.00-6.00]	<b>0.007</b>
SIC score		2.00 [2.00-3.00]	2.00 [2.00-3.00]	3.00 [2.00-3.00]	3.00 [2.00-3.00]	3.00 [2.00-3.00]	2.00 [2.00-3.00]	3.00 [2.00-3.00]	3.00 [2.00-3.00]	0.671
DIC score		3.00 [2.00-4.00]	3.00 [2.00-4.00]	3.00 [2.00-3.00]	3.00 [2.00-4.00]	3.00 [2.00-4.00]	3.00 [2.00-3.50]	3.00 [2.00-4.00]	3.00 [2.00-3.00]	0.533

A5: Amplitude of clot firmness 5 minutes after CT; A10: Amplitude of clot firmness 10 minutes after CT; Ag: Antigen; ALT: Alanine aminotransferase; aPTT: Activated partial thromboplastin time; AST: Aspartate aminotransferase; CFT: Clot formation time; CRP: C reactive protein; CT: Clotting time; dl: deciliter; DIC: Disseminated intravascular coagulopathy; GFR: Glomerular filtration rate; HTC: Hematocrit; IL-6: Interleukin 6; INR: International normalized ratio; F: Factor; FVIII: Factor VIII; g: gramme; L: liter; LDH: Lactate Dehydrogenase; LI30: Lysis index at 30 minutes after CT; LI60: Lysis index at 60 minutes after CT; MCF: Maximum clot firmness; mg: milligram; ML: Maximum lysis during runtime; ng: nanogramme; O: blood group O; Non-O: blood group A, B and AB; PCT: Procalcitonin; R:Co: Ristocetin cofactor; sec: seconds; SOFA: Sequential organ failure assessment; SIC: Sepsis-induced coagulopathy; U: Unit; vWF: von Willebrand factor;