

A pilot study to examine the effect of passive straight leg raise performed during cardiopulmonary resuscitation on cerebral perfusion measured by non-invasive cerebral oximetry

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Supplemental eTable 1: Baseline demographics, diagnosis, CPR duration and outcomes in patients enrolled in this study

Subject	Age	Sex	Race	Location of arrest	Initial Cardiac rhythm	Time until CPR commenced (minutes)	Duration of CPR prior to enrolment (minutes)	Admission diagnosis	Duration of CPR (minutes)	Outcome	ICU LOS (days)	Hospital LOS (days)
1	74	Male	Caucasian	Ward	Asystole	2	6	Sepsis	35	Deceased	N/A	N/A
2	54	Male	Asian	Ward	Asystole	5	20	CCF	40	Deceased	N/A	N/A
3	78	Male	Caucasian	ICU	Shockable		5	ACS	12	Deceased	172.3	172.3
4	63	Female	Caucasian	Ward	Asystole		10	ACS	40	Deceased	N/A	N/A
5	85	Female	Caucasian	ICU	VF		5	APO	20	Survived	220	285
6	75	Male	Caucasian	Ward	Asystole		30	COPD	36	Deceased	N/A	N/A
7	85	Female	Indigenous	ICU	Asystole		4	Takotsubo CM	15	Deceased	84	84
8	45	Female	Caucasian	ICU	VF		2	ACS	15	Survived	102	188
9	66	Male	Indigenous	Ward	Asystole	2	15	COPD	35	Deceased	N/A	N/A
10	85	Female	Asian	ICU	Asystole		10	ACS	20	Survived	238	346

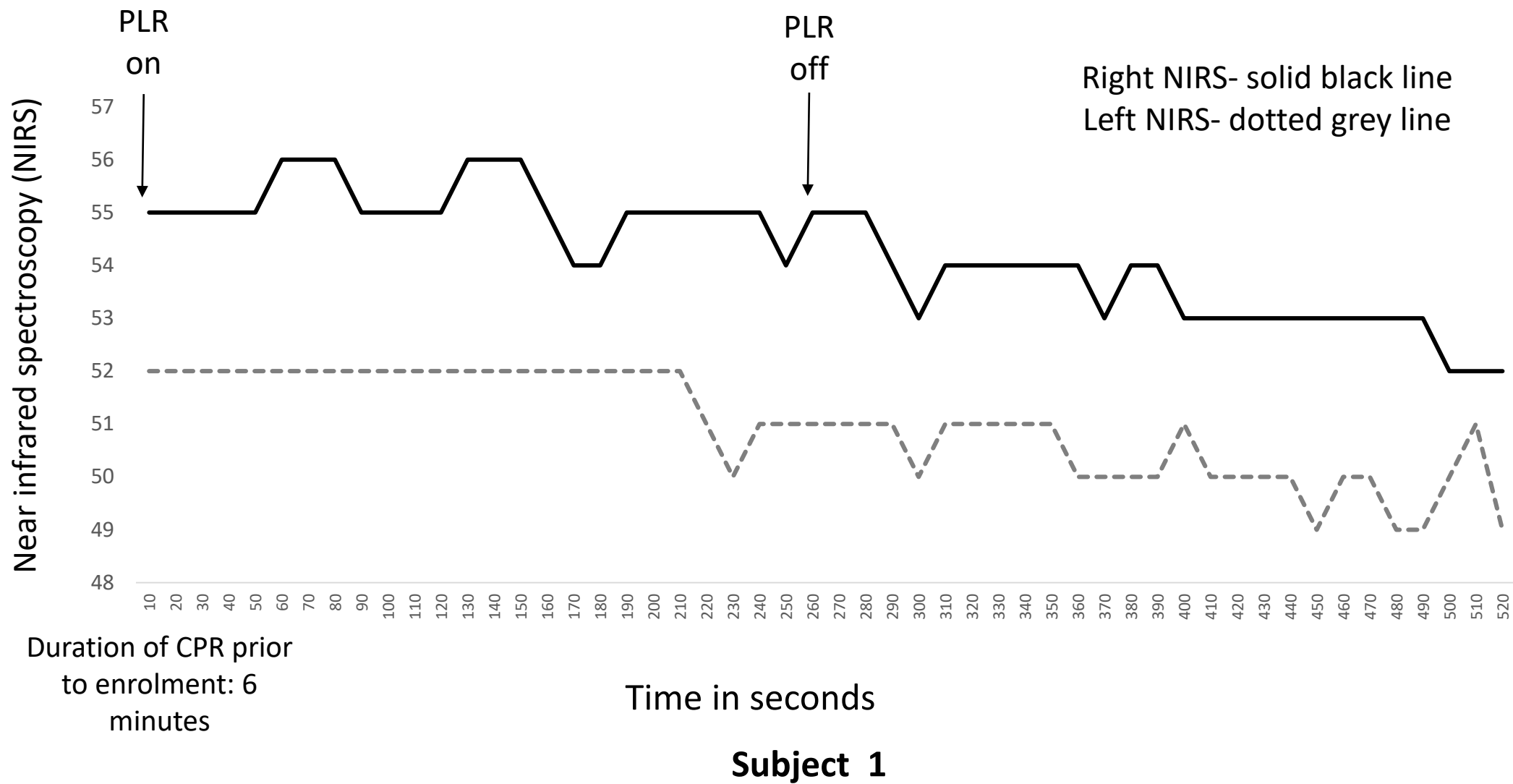
CPR, cardiopulmonary resuscitation; LOS, length of stay; CCF, congestive cardiac failure; ACS, acute coronary syndrome; COPD, chronic obstructive pulmonary disease; CM, cardiomyopathy; N/A, not applicable; VF, ventricular fibrillation.

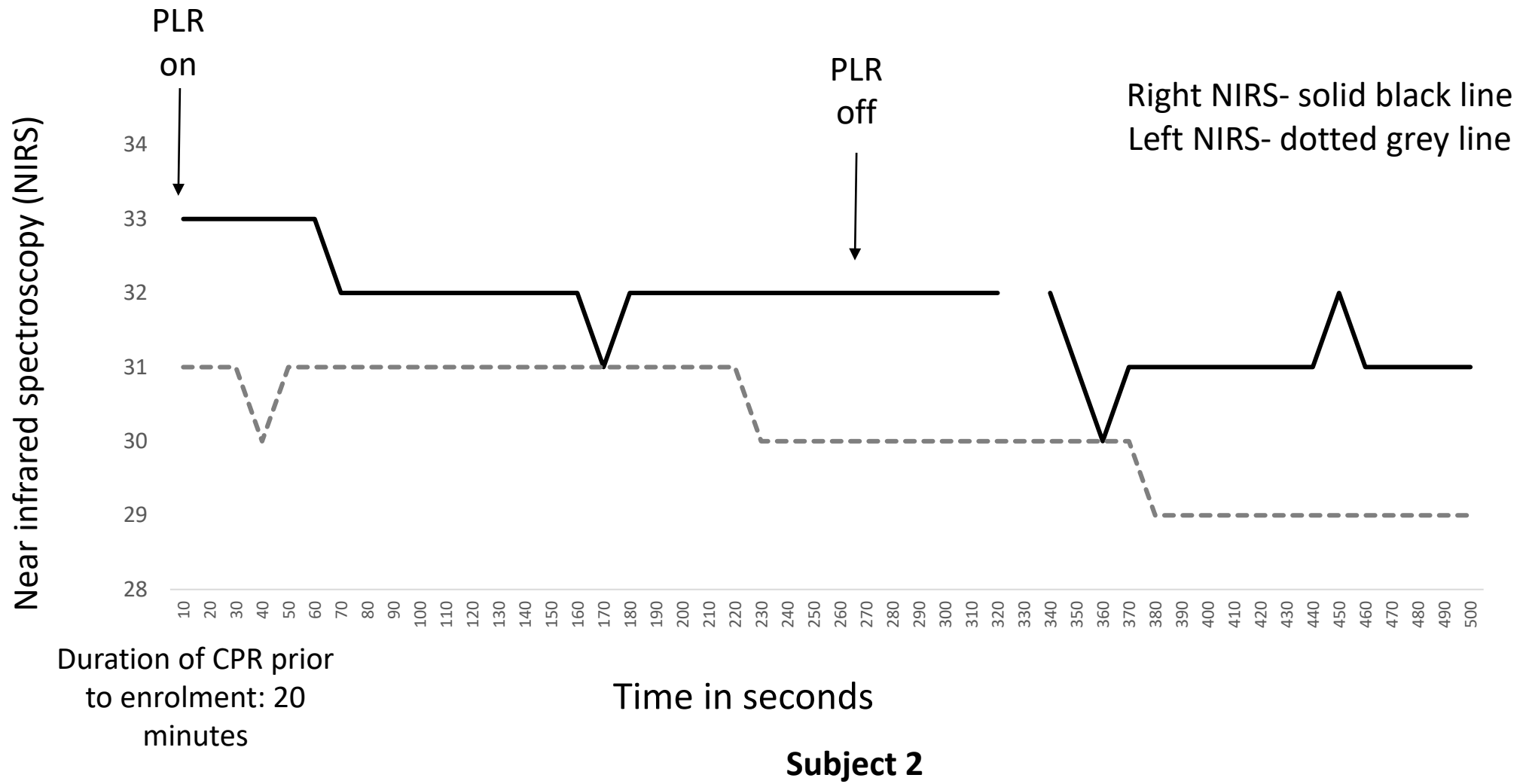
Supplemental eTable 2: Average NIRS value in the right and left electrodes during the first and second 2 cycles when the subjects were enrolled in the study.

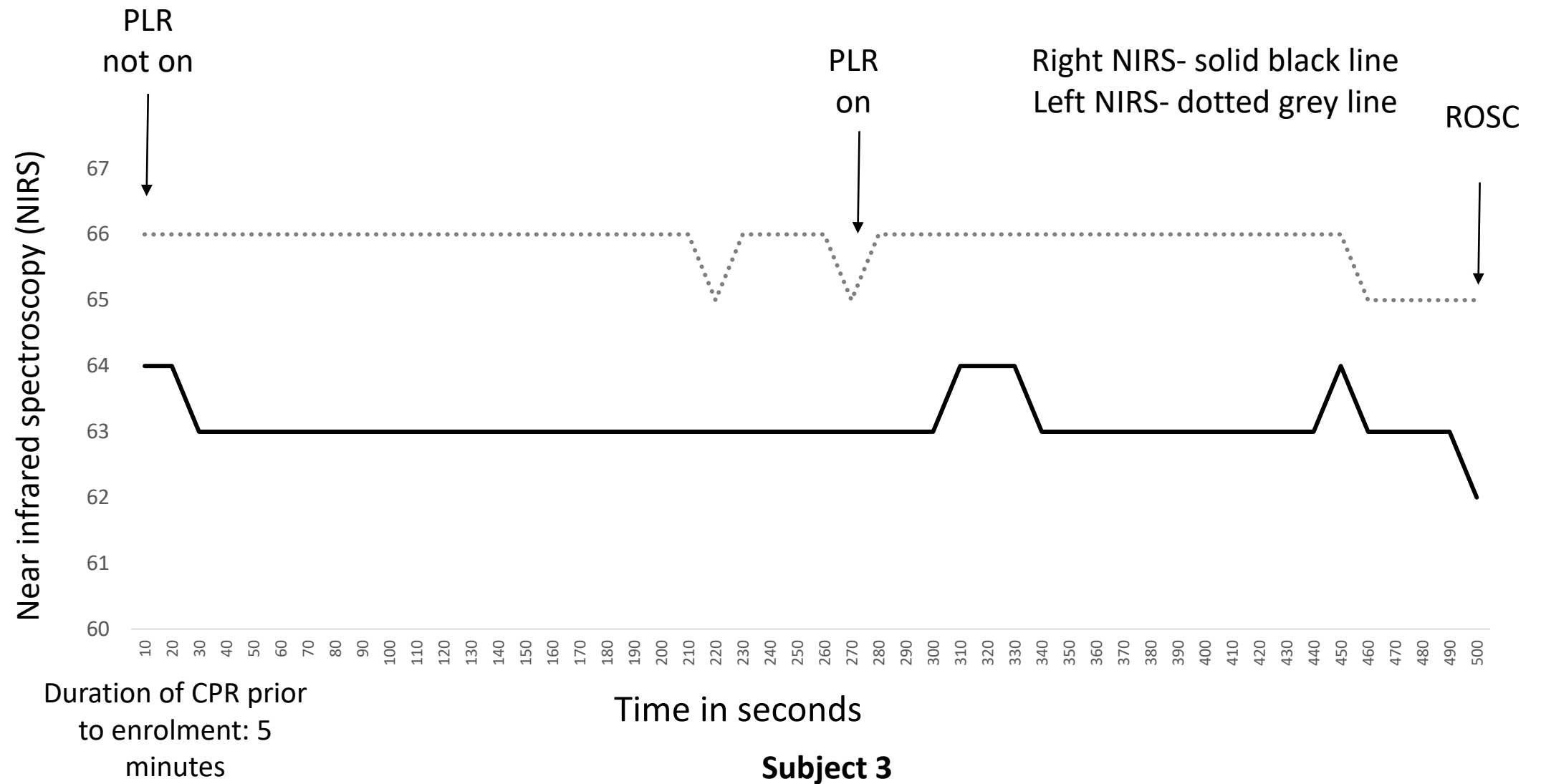
Subject number	PLR (1 st or 2 ND) 2 cycle of CPR (Group)	Average Right NIRS (first 2 cycle) mean (SD)	Average Right NIRS (second 2 cycle) mean (SD)	95% CI of difference	P value	Average Left NIRS (first 2 cycles) mean (SD)	Average Left NIRS (second 2 cycles) mean (SD)	95% CI of difference	P value
1	1 st (Group I)	55.12 (0.59)	53.38 (0.80)	1.40 to 2.06	<0.001	51.77 (0.51)	50.23 (0.71)	1.19 to 1.88	<0.001
2	1 st (Group I)	32.19 (0.49)	31.30 (0.56)	0.59 to 1.19	<0.001	30.81 (0.40)	29.46 (0.51)	1.09 to 1.61	<0.001
3	2 nd (Group II)	63.07 (0.27)	63.13 (0.46)	-0.27 to 0.15	0.591	65.93 (0.27)	65.78 (0.42)	-0.05 to 0.34	0.152
4	2 nd (Group II)	60.92 (0.28)	61.41 (0.50)	-0.72 to -0.26	<0.001	61.84 (0.55)	61.89 (0.89)	-0.47 to 0.37	0.815
5	1 st (Group I)	56.12 (0.33)	54.36 (0.99)	1.34 to 2.18	<0.001	55.12 (0.33)	53.40 (0.82)	1.37 to 2.07	<0.001
6	1 st (Group I)	28.89 (0.32)	28.25 (0.44)	0.41 to 0.86	<0.001	29.00 (0.00)	27.45 (0.76)	1.26 to 1.84	<0.001
7	2 nd (Group II)	49.63 (1.04)	48.24 (1.20)	0.76 to 2.01	<0.001	46.96 (0.76)	46.88 (0.44)	-0.27 to 0.43	0.635
8	2 nd (Group II)	39.42 (1.06)	41.64 (0.49)	-2.69 to -1.75	<0.001	44.93 (0.47)	44.84 (0.37)	-0.15 to 0.33	0.474
9	1 st (Group I)	36.69 (0.47)	35.25 (0.44)	1.17 to 1.72	<0.001	37.44 (0.51)	35.18 (1.40)	1.47 to 3.04	<0.001
10	2 nd (Group II)	44.33 (0.48)	44.40 (0.50)	-0.34 to 0.21	0.626	43.44 (0.51)	43.56 (0.51)	-0.17 to 0.40	0.415

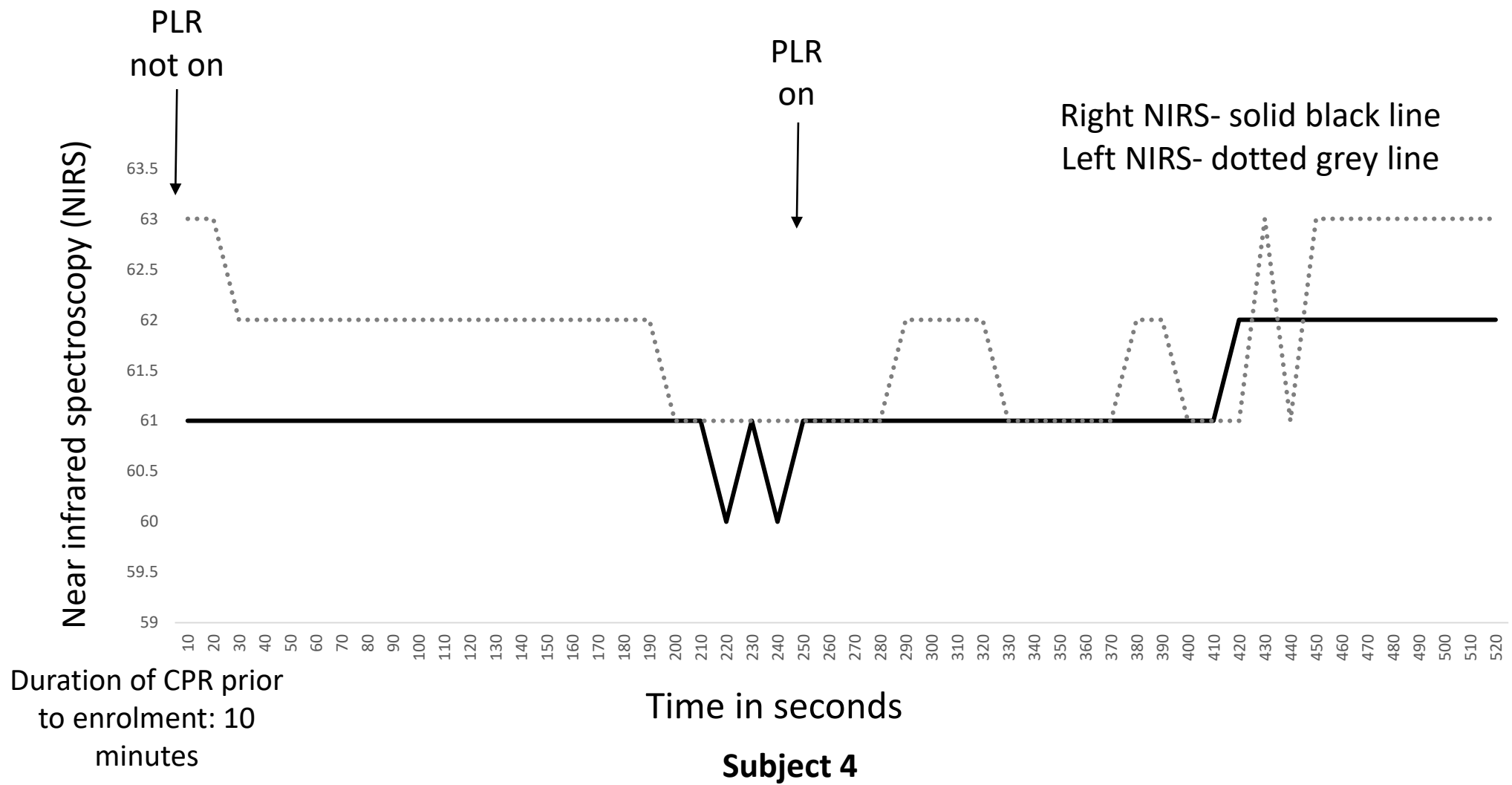
P value – measured as independent t test.

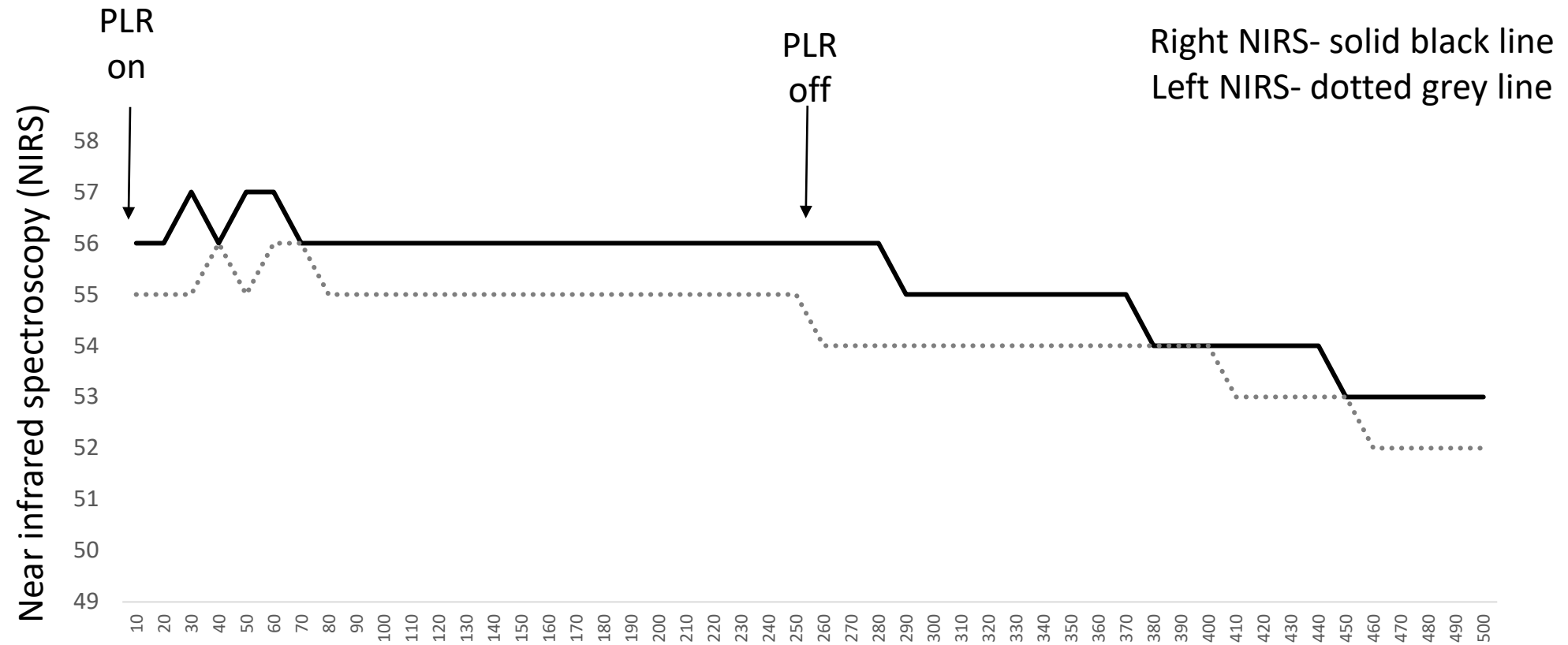
Supplemental Figures- Near infrared spectroscopy (NIRS) values in all the ten subjects enrolled in the study







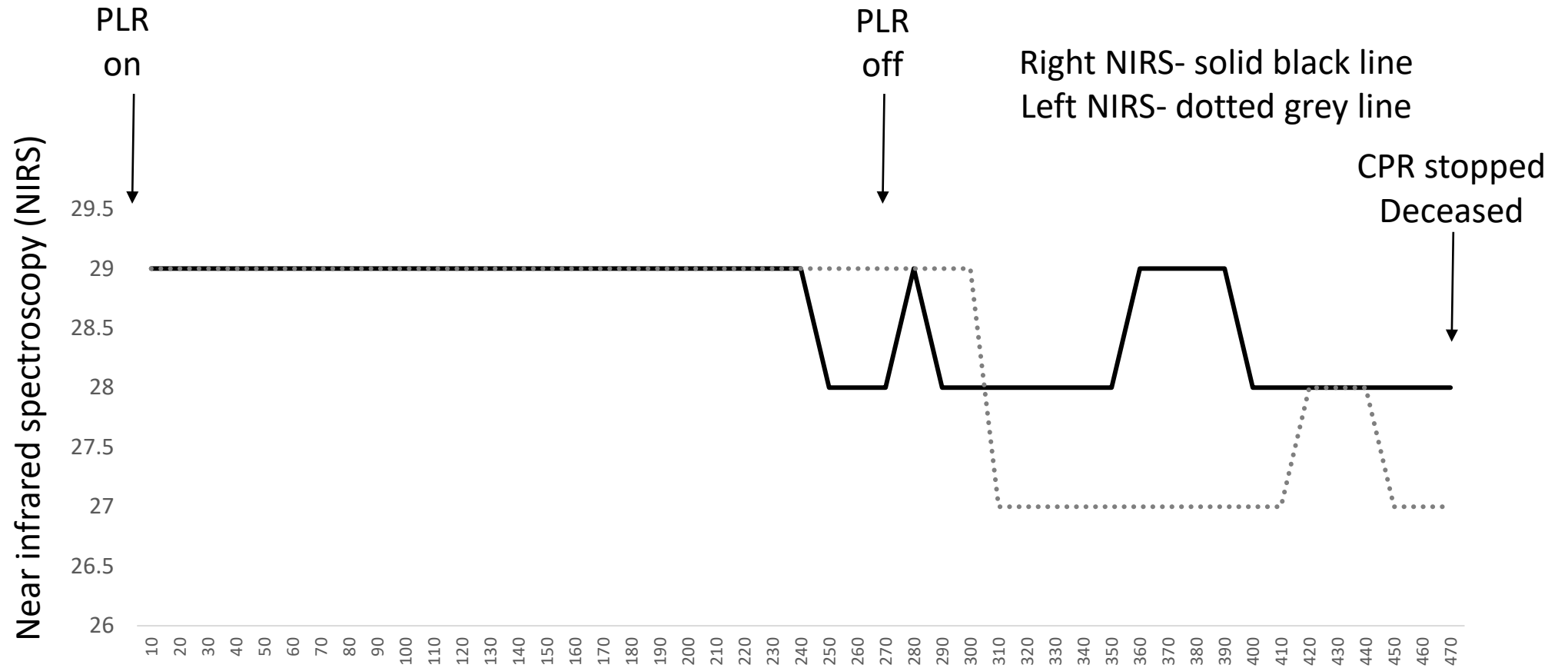




Duration of CPR prior
to enrolment: 5
minutes

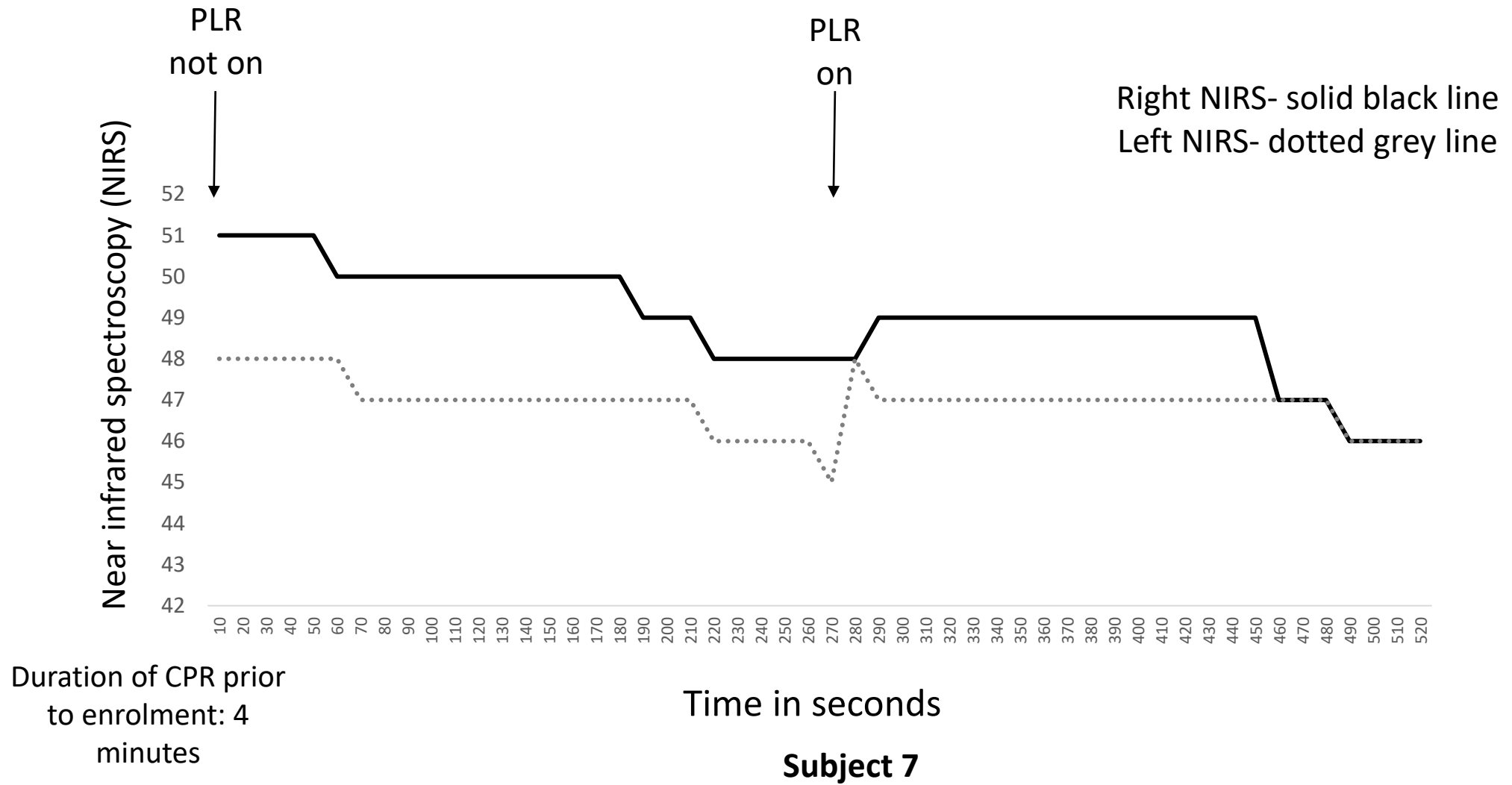
Time in seconds

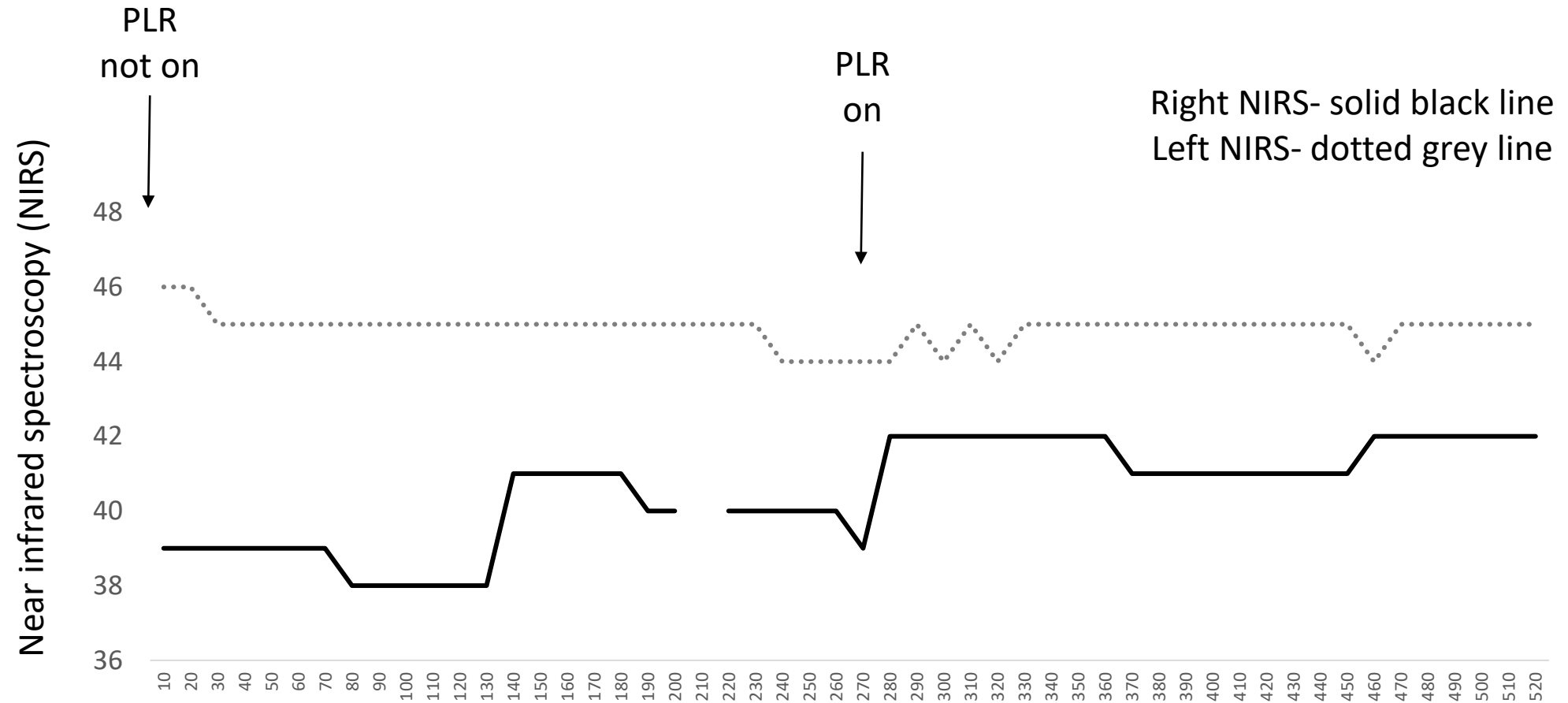
Subject 5



Duration of CPR prior
to enrolment: 30
minutes

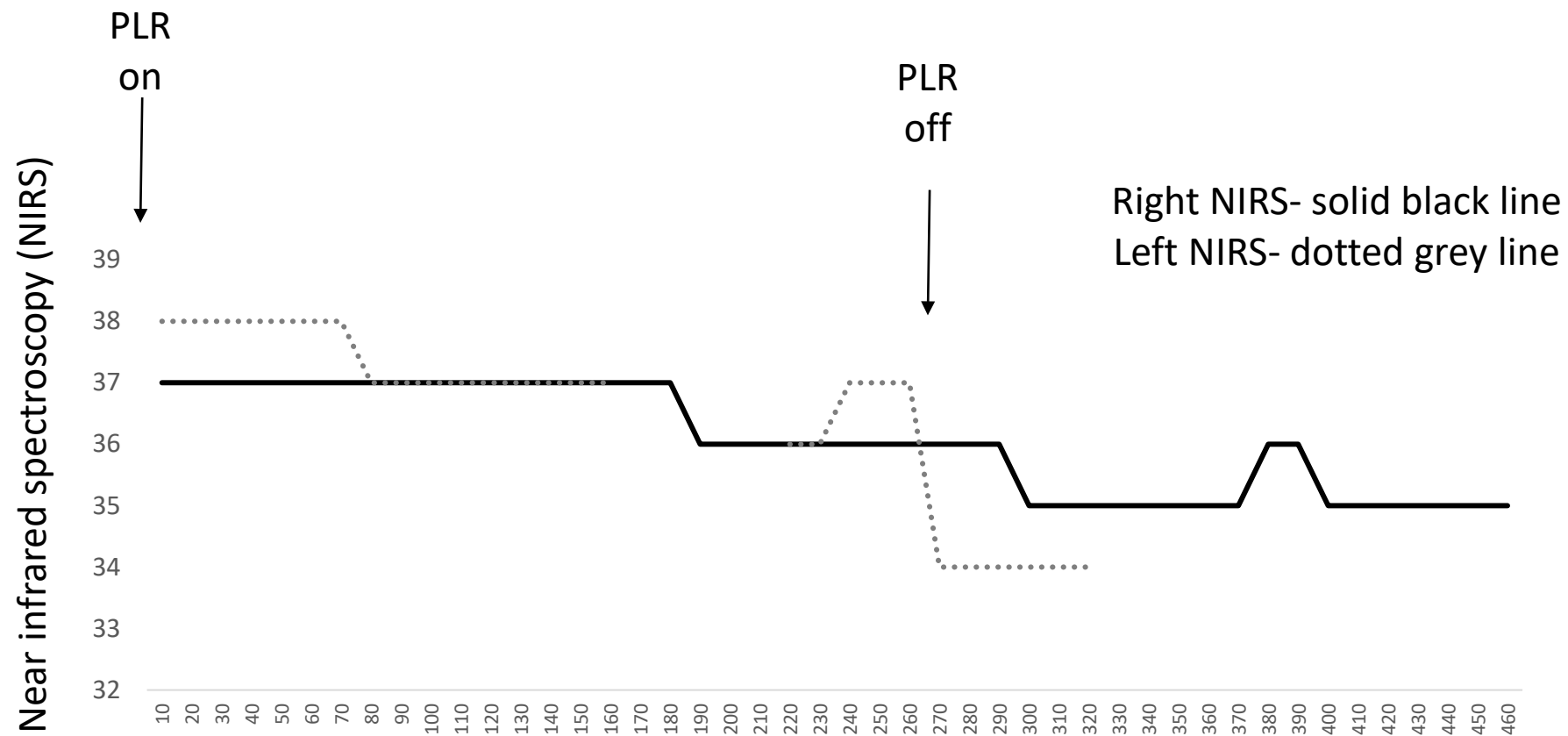
Time in seconds
Subject 6





Duration of CPR prior
to enrolment: 2
minutes

Time in seconds
Subject 8



Duration of CPR prior
to enrolment: 15
minutes

Time in seconds

Subject 9

