**SUPPLEMENTARY MATERIALS**

**Supplementary Table 1** Class-specific protocols

*Laser (Radial and Standard)*. This protocol of 66 minutes is based on an existing training protocol. The athlete reached 76% of HRR within 5 minutes of warming up on 65 rpm.

Finish

Start

Finish

Start

Finish

Start

Finish

Start

Finish

Start

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Leg | Activity | Duration (minutes) | Intensity  (% of HRR) | Cadence  (rpm) |
| Upwind  Reach  Downwind | Cycling | 12  5  5 | 80  80  60 | 60  70  85 |
| Upwind  Reach  Downwind | 12  5  5 | 80  80  60 | 60  70  85 |
| Upwind  Reach  Downwind | 12  5  5 | 80  80  60 | 60  70  85 |

*470 Crew*.This protocol of 50 minutes is based on a regular sailing race with an outer trapezoid course (O2). The athlete reached 70% of HRR within 5 minutes of warming up on 85 rpm.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Leg | Activity | Duration (minutes) | Intensity  (% of HRR) | Cadence  (rpm) |
| Upwind  Reach  Downwind | Cycling | 12  5  8 | 70  90  80 | 85 |
| Upwind  Downwind  Reach | 12  8  5 | 70  80  90 |

*470 Helm*. This protocol of 50 minutes is based on a regular sailing race with an outer trapezoid course (O2). The athlete reached 70% of HRR during 5 minutes of warming up on 65 rpm.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Leg | Activity | Duration (minutes) | Intensity  (% of HRR) | Cadence  (rpm) |
| Upwind  Reach  Downwind | Cycling | 12  5  8 | 80  90  70 | 70  65  85 |
| Upwind  Downwind  Reach | 12  8  5 | 80  70  90 | 70  85  60 |

*Finn*. This protocol of 45 minutes is based on a regular sailing race with a windward/leeward course (L). The athlete reached 80% of HRR in a warming up of 1 km rowing. In addition, 30 seconds were reserved between the legs to enable the athlete to switch from cycling to rowing ergometer and vice versa.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Leg | Activity | Duration (minutes) | Intensity  (% of HRR) | Cadence (rpm) | Drag factor |
| Upwind  Downwind | Cycling  Rowing | 15  10 | 80  85 | 60  - | -  140 |
| Upwind  Downwind | Cycling  Rowing | 15  5 | 80  83 | 60  - | -  140 |

*RS:X*. This protocol of 26 minutes is based on a regular sailing race with a windward/leeward course (L). The athlete reached 72% of HRR in a warming up of 1 km rowing.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Leg | Activity | Duration (minutes) | Intensity  (% of HRR) | Drag factor |
| Upwind  Downwind | Rowing | 8\*  5\*\* | 80  90 | 120 |
| Upwind  Downwind | 8\*  5\*\* | 80  90 |

\*The first 15 seconds of every minute were on maximal intensity to mimic pumping activity.

\*\*The first 10 seconds of every minute were on maximal intensity to mimic pumping activity.