



DRAFT RESEARCH REPORT

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**Report from a
Pilot Study Completed by
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THE UNIVERSITY OF HULL

INTRODUCTION

Sports OxyShot is a relatively new product to the market and contains massive amounts of bio-available oxygen for use as an ergogenic supplement.

Sports OxyShot is a nutritional supplement that was derived from NASA technology and is the result of several years of research and development. It contains 100% natural ingredients, manufactured without the use of dangerous chemical compounds.

Sports OxyShot contains only de-ionised water, Atlantic sea salt and at least 150,000 parts per million (15% v/v) diatomic oxygen at manufacture. It is this attribute that it is claimed will help athletes optimise their performance. Sports OxyShot has been analysed by the Australian Sports Drug Testing Laboratory, confirmed to contain no banned substances, and been accepted onto the ASDA/AIS/AGAL Supplement database.

The aim of this pilot study was to investigate whether Sports OxyShot would improve performance and to determine any possible physiological reasons for any performance improvement.

METHODS

Subjects All male - currently based on eight subjects - we will continue testing until we have data on 15 who will complete both the Oxyshot and Placebo trials in a random fashion.

Protocol Each subject undertook a VO₂max test on a cycle ergometer until volitional exhaustion. This was then followed on a separate day by a 45 min cycling trial at 70% VO₂max, followed immediately by a 15 min time trial (TT). The trials were conducted on our isokinetic cycle ergometer (SRM).

Expired gases were analysed using an on line breath-by-breath system (Cosmed, Quark) during both the 70% VO₂max trial, as well as the 15 min TT. During both of the trials, blood was collected pre-Test, post- ingestion of either the Oxyshot or Placebo, and then at 10 min intervals for 40 min and then at 45 min (end of trial). Blood was collected at 5 min post-test and then at 5 min intervals during the TT and then finally at 5 and 10 min post TT exercise.

Blood Analysis. Blood was analysed for lactate (YSI 1500 Sport) and blood gases (pH, PO₂, PCO₂ - AVL).

Rating of Perceived Exertion A rating of perceived exertion (RPE) as well as heart rate (Polar S81 0s) were monitored throughout the entire test period.

DOSAGE

SPORTS OXYSHOT

20 ml of 15% v/v (stabilized oxygen) of Sports Oxyshot was ingested 30 minutes prior to the trials.

PLACEBO

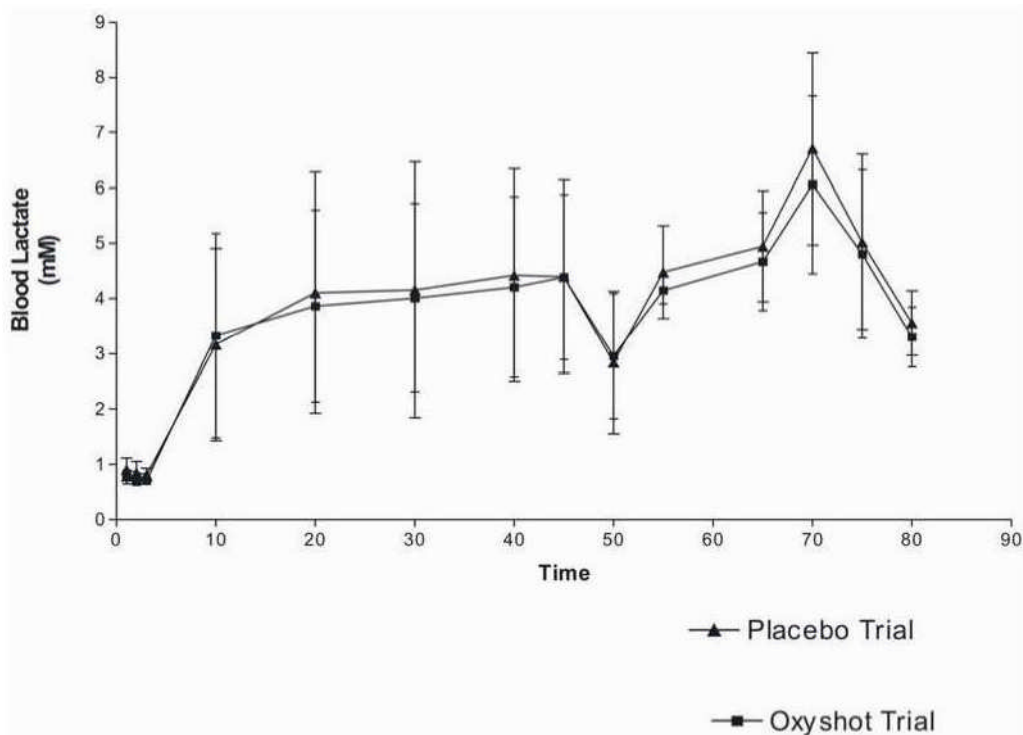
20 ml of a mild chlorinated water was ingested 30 minutes prior to the trials (on the Placebo Schedule).

MEAN DATA

Results

With respect to some of the blood gas measurements, most notably pH, there was no change in the data - across the trials.

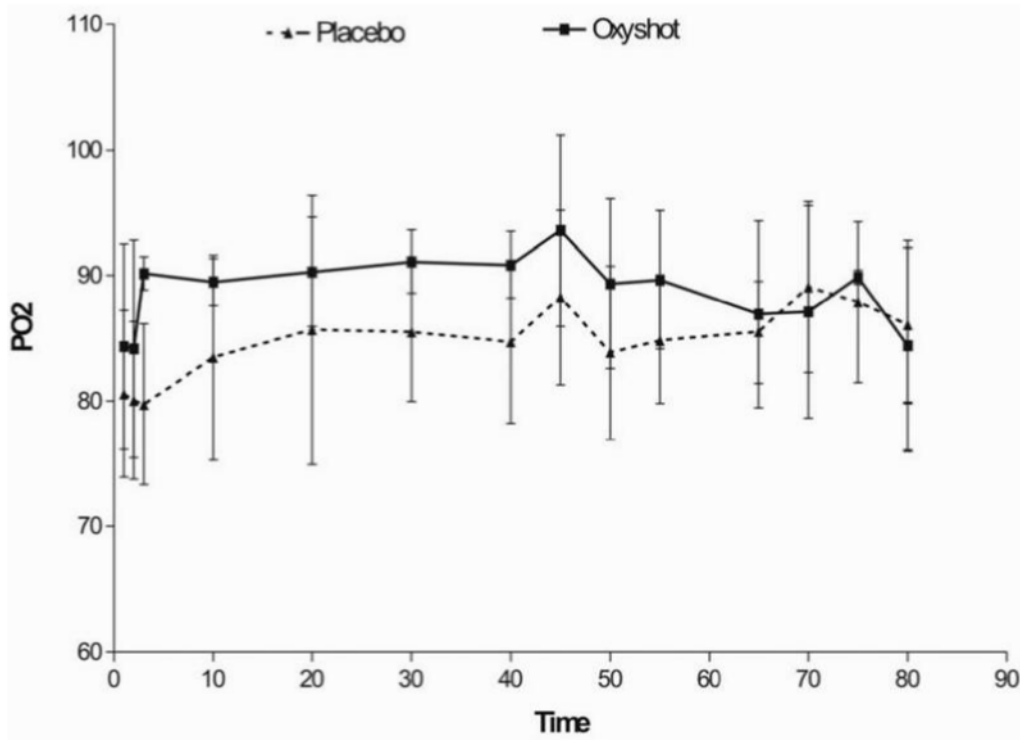
Lactate Data



As you can see the lactate data in the performance trials is somewhat higher in the placebo than in the Oxyshot trial. Although this is not significantly different from a statistical perspective, **it may be significant from a practical significance.** Given the large amount of variability in the data it would require a large trial (multicentre possibly) to find statistical significance.

MEAN DATA

THIS IS THE P02 DATA



Time to Exhaustion

Subjects completed more work in the Sports Oxyshot trial than they did in the placebo trial. In the Oxyshot trial they completed 8.4 ± 1.2 Km whilst in the Placebo trial they completed 7.9 ± 1.5 km.

Comments/Discussion

Although the data is not significantly different from a statistical perspective, it may be significant from a practical significance. Given the large amount of variability in the data it would require a large trial (multicentre possibly) to find statistical significance.

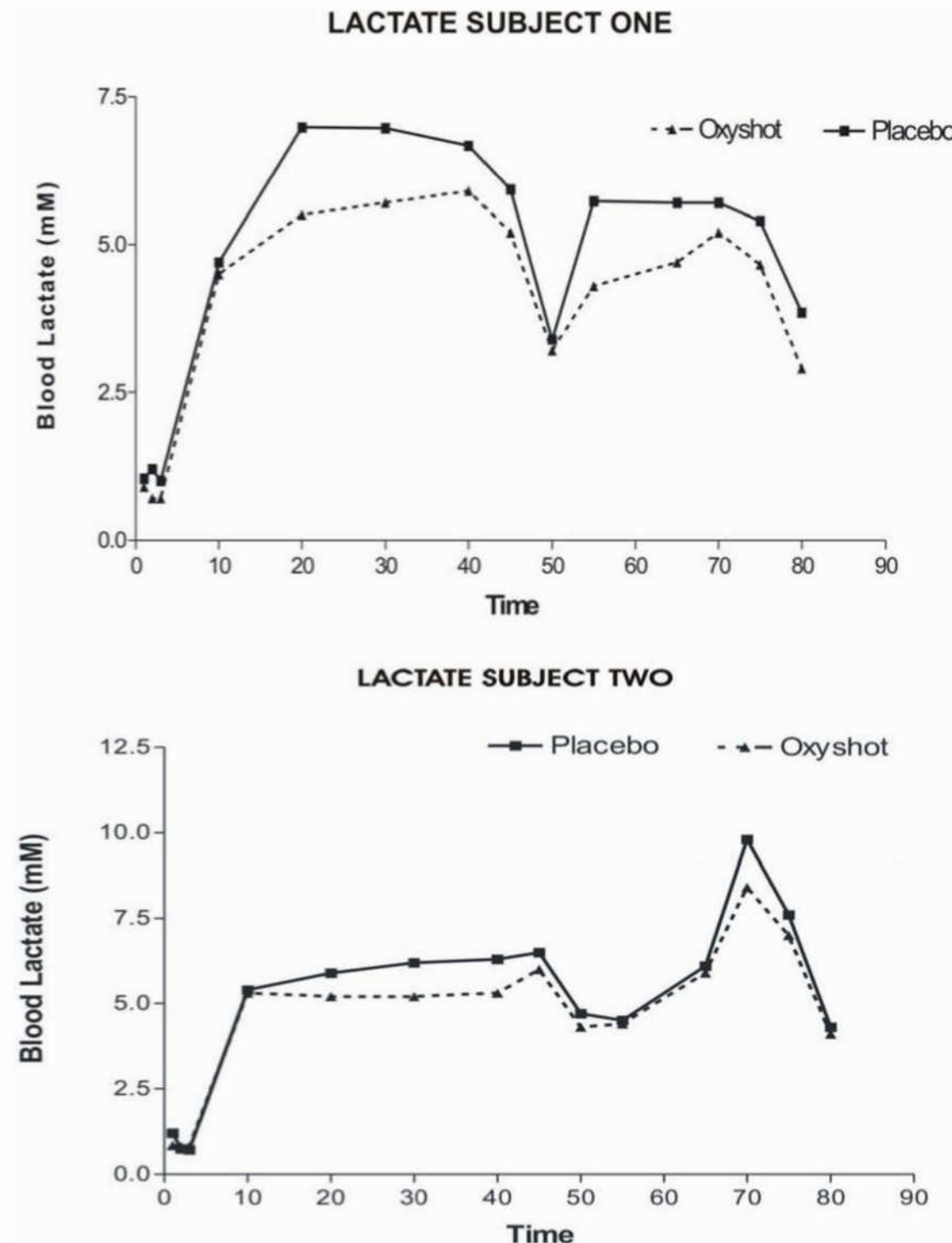
We will continue to investigate and analyse the volume of data that we have and will report back when the study is complete.

SAMPLES OF INDIVIDUAL DATA

These graphs show a LOWER LACTATE LEVEL for a given workload in the Sports OxyShot Condition.

Lactate

Individual Data for Two subjects

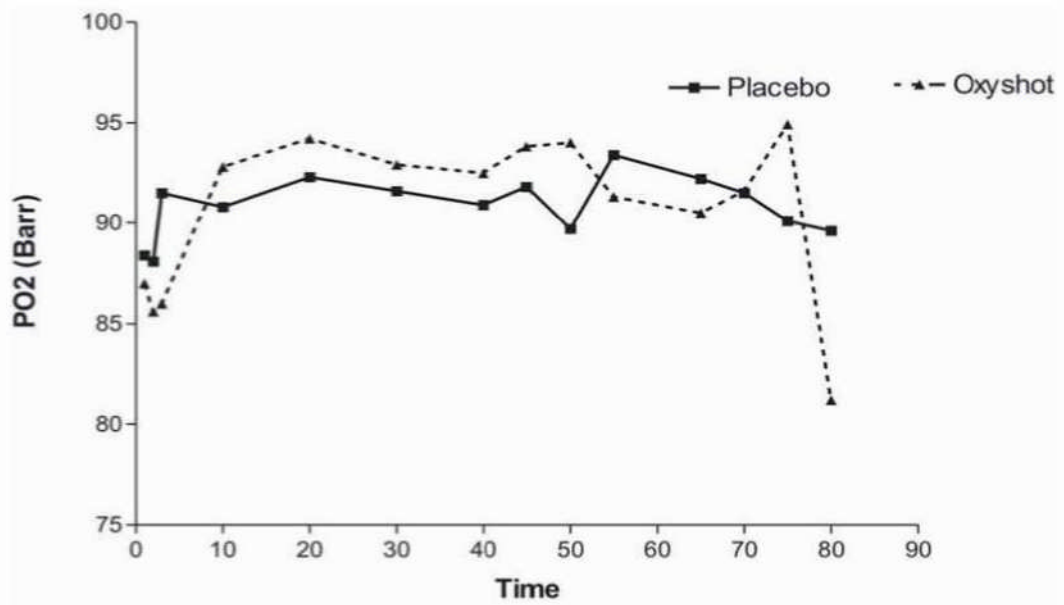


These graphs show a HIGHER PARTIAL PRESSURE OF ARTERIAL OXYGEN in the Sports OxyShot condition.

PO2

Individual Data for Two subjects

Indiv PO2
SUBJECT ONE



SUBJECT TWO

