Ozone autohemotherapy in athletics

Study in mountain bikers
Munich, May 23 – 25, 2003

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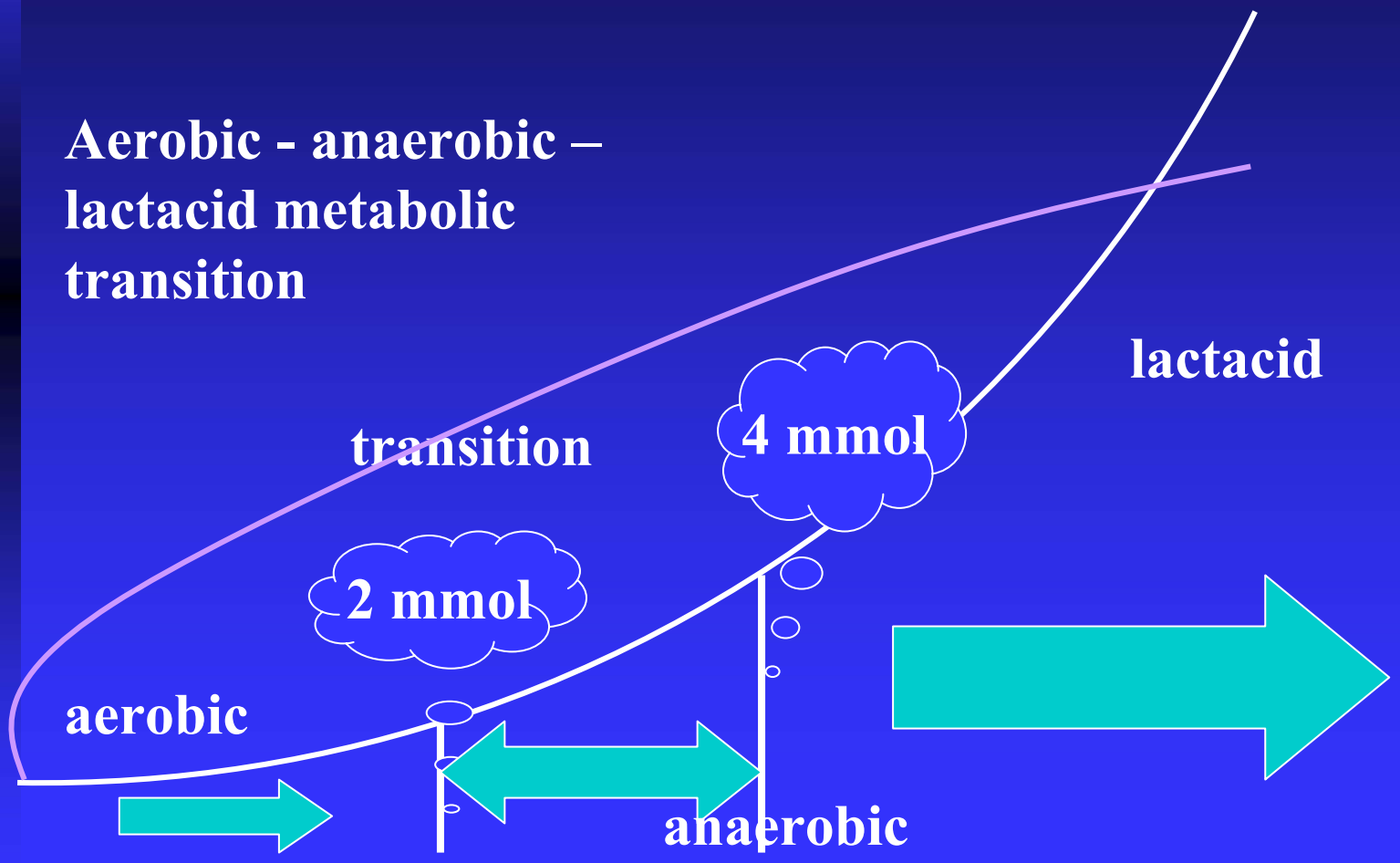
Lactate performance curve



Possible optimization factors

- Intracellular metabolism
  Resynthesis of ATP, O_2, enzyme activity
  carbohydrate turnover, fat metabolism, protein
- Nutrition
  biochemical, build-up substances, adaptation
- Hormone potential
  improved utilisation
  increased production

What we expect

- trendwise submaximal improvement
- improved regeneration
- hematocrit unchanged
- No or hardly any shift in maximum values

Hemoglobin-to-oxygen bonding

- Hb O_2 +
- 2,3-diphospho-glycerate

- Hb - 2,3-diphospho-glycerate
- + O_2

Parameters investigated

Hf 2 mmol **Hf 4 mmol** **Hf max** **Hf 3 min**

W 2 mmol **W 4 mmol** **W max**

Hematocrit

Change in hematocrit

- before therapy

  43,2

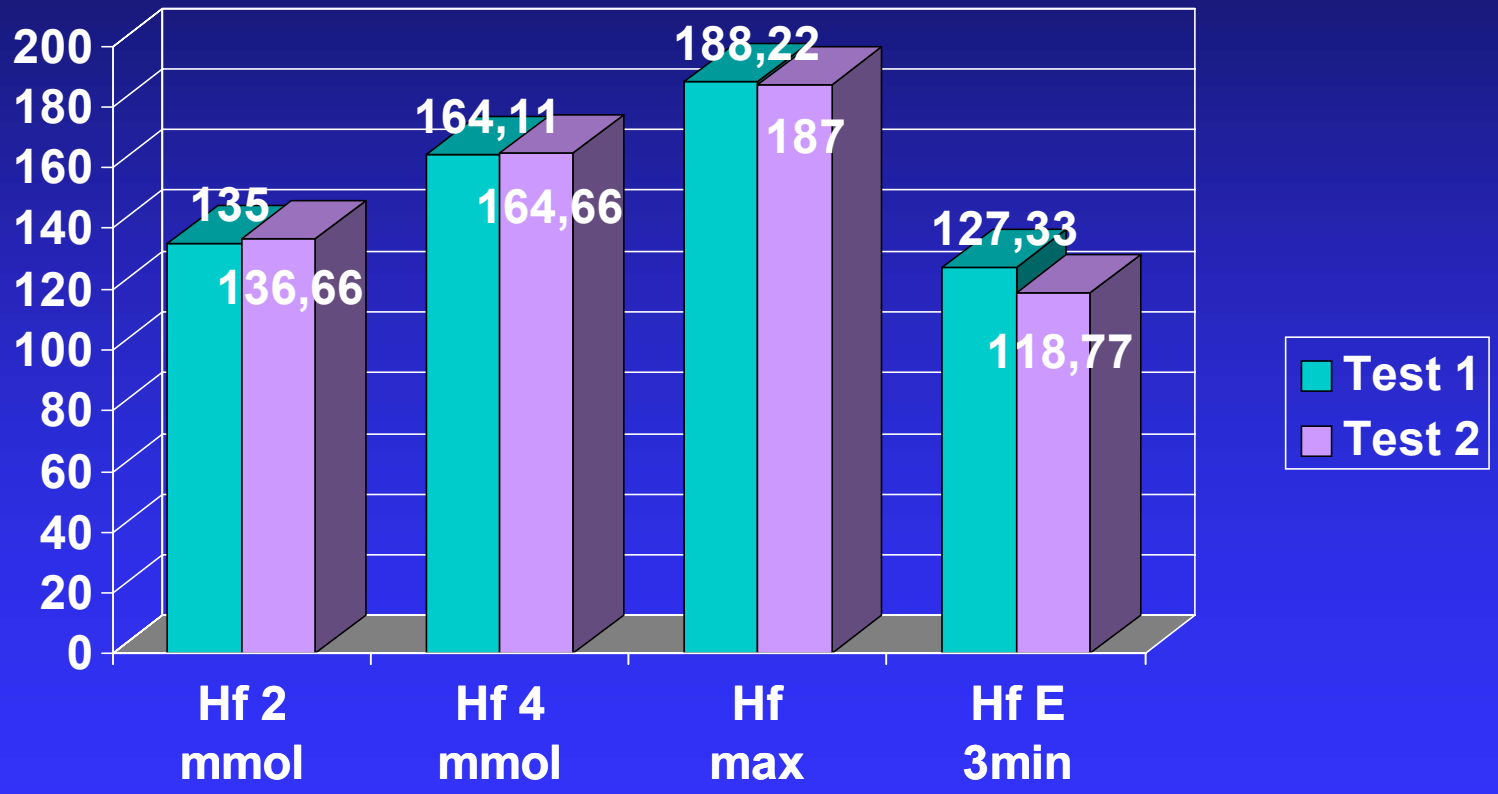
  no correspondence

- after therapy

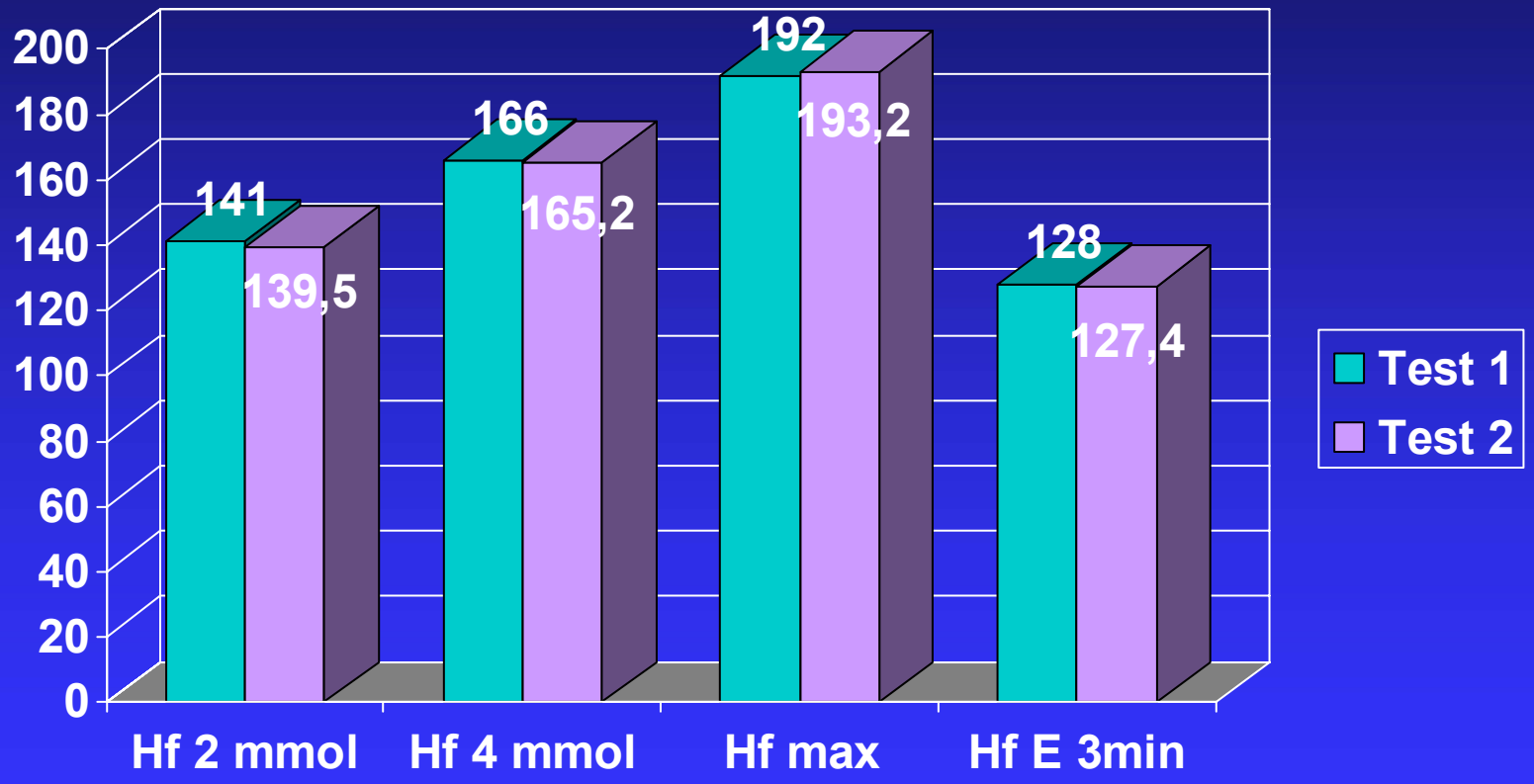
  42,9

  significant change

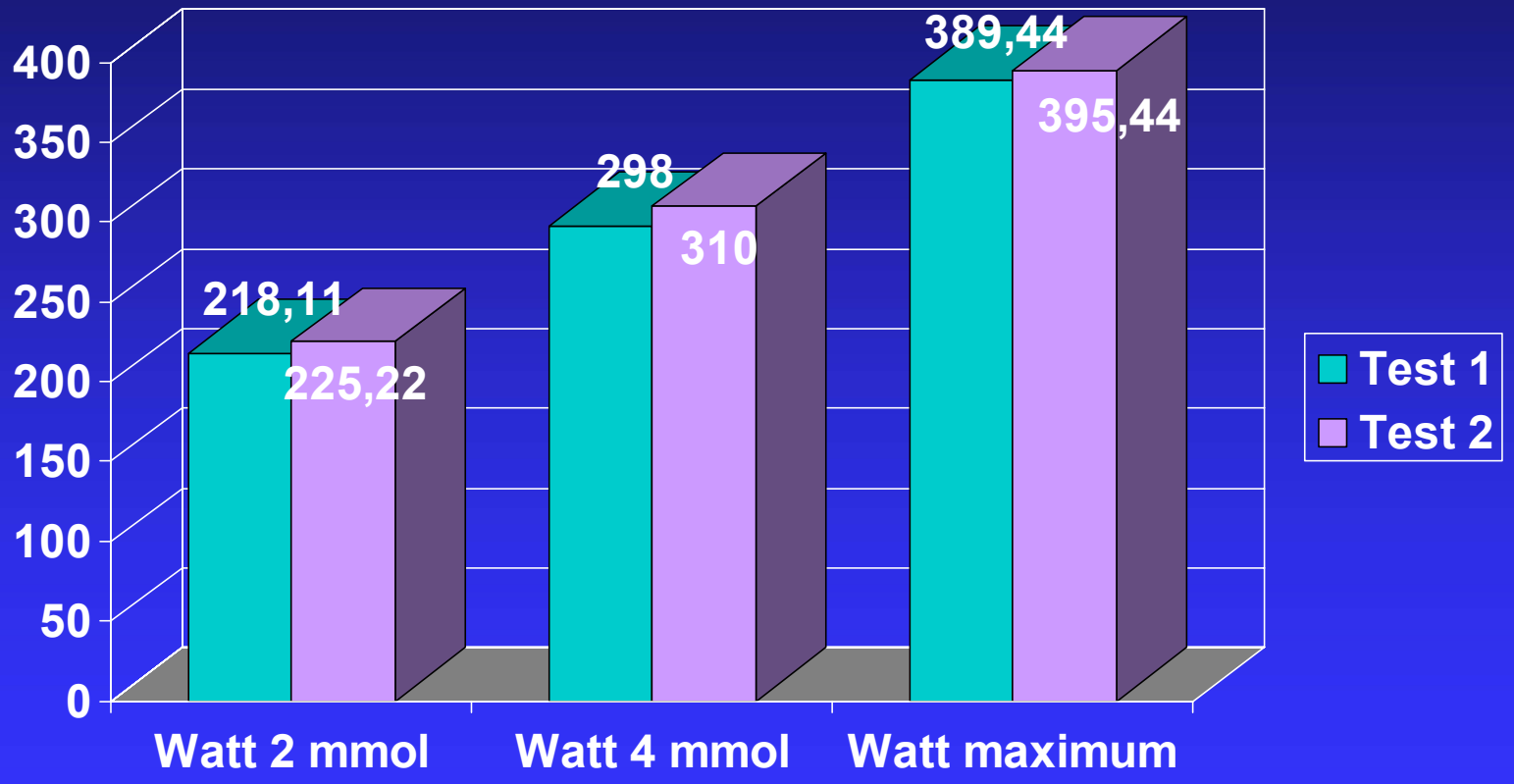
Heart rate at thresholds



Heart rate at thresholds after 0_2 therapy



Performance in Watts



Performance in Watts / oxygen