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Intraprostatic injection of Liproca® Depot (2-hydroxy flutamide) in patients with localised prostate cancer

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LIDDS AB

Anders Bjartell:

Board member LIDDS AB
Introduction

Liproca® Depot
Novel depot formulation of 2-hydroxyflutamide, in a calcium sulphate suspension (NanoZolid)

Why Liproca® Depot?
- Intraprostatic injection  ->  Local treatment
- Slow-release formula  ->  Long lasting
- Safe  ->  No systemic hormonal effects
- Convenient procedure  ->  Similar to a prostate biopsy
Liproca Depot targets Active Surveillance (AS) patients with intermediate risk prostate cancer

- Gleason 3+4 or Gleason 4+3 or PSA 10-20 ng/ml
- Very low – Low Risk
- Intermediate Risk (35%)
- High Risk
- Locally advanced
- Metastatic

Liproca Depot

Active Surveillance

Partial Gland Ablation

Radical treatment (surgery and/or radiotherapy)

A future innocuous treatment with minimal side-effects as a companion to AS to delay the need for definitive therapy
LPC-004 study design

- 61 patients on Active Surveillance in
  - Canada
  - Finland
  - Lithuania

- Dose Levels
  - 35% of prostate volume (10 pat)
  - 45% of prostate volume (10 pat)
  - 16 mL (21 pat)
  - 20 mL (20 pat)

- Single dose intraprostatic injection
- 6 months follow-up
- Open label study: second injection after PSA recurrence (12 pat)

Limitations to the study design:
- No control group
- No pathology data
Objectives

**Primary**
- To define the highest tolerable dose of Liproca® Depot
- To determine the level of PSA reduction at Month 5 for the doses in Part II

**Secondary**
- PSA reduction at all timepoints
- Quality of Life
- Safety
PSA Response

- Max reduction on PSA at Month 2-4
  - 16 mL: 67% (Month 2)
  - 20 mL: 50% (Month 4)
- Mean PSA decrease at nadir
  - 16 mL: 35%
  - 20 mL: 31%
- PSA reduction at Month 6
  - 16 mL: 48% responders
  - 20 mL: 35% responders

Relationship between serum PSA response and anti-cancer effect remains to be shown in phase III
Sub-group analysis

Low risk patients
Gleason score: ≤ 6
PSA: < 10 ng/ml

Intermediate risk patients
Gleason score: 7 and/or
PSA: 10-20 ng/ml

➢ A larger proportion of intermediate risk patients are PSA responders
I-PSS score mild to moderate

Despite large drug volumes injected, I-PSS score was mild to moderate in all groups

0 - 7: Mild
8 - 19: Moderate
20 - 35: Severe
<table>
<thead>
<tr>
<th></th>
<th>Treatment Group</th>
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<tbody>
<tr>
<td></td>
<td>35 vol% N=10</td>
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<tr>
<td>Any AE leading to withdrawal</td>
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</tr>
<tr>
<td>Any AE leading to death</td>
<td>0</td>
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<tr>
<td></td>
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<tr>
<td>Any AE</td>
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<td>Most common Adverse Reactions</td>
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<tr>
<td>Haematuria</td>
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<tr>
<td>Urinary retention</td>
<td>3</td>
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<tr>
<td>Prostatitis</td>
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<tr>
<td>Serious Adverse Reactions</td>
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<td>Bacteremia</td>
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<tr>
<td>Sepsis</td>
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<td>Prostatitis</td>
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Conclusions

➢ A single intraprostatic injection of Liproca Depot reduced PSA levels in 60%, and in 40% for > 6 months
➢ No systemic hormonal adverse reactions
➢ Study confirms the long-term controlled release using the NanoZolid technology
➢ Safe and well tolerated
➢ 84% of patients were amenable to a 2\textsuperscript{nd} injection of Liproca Depot

This approach warrants further evaluation as an adjunct to active surveillance in men with intermediate risk prostate cancer.
Thanks to patients and to all investigators

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