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

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Disclosures

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Laurence Klotz, Jonathan Giddens, Peter Incze, Kenneth Jansz, Mindaugas Jievaltas, Ricardo Rendon, Albertas Ulys, Teuvo Tammela:

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Niklas Axén, Stefan Grudén, Charlotta Gauffin:

LIDDS AB

Anders Bjartell:

Board member LIDDS AB

Introduction

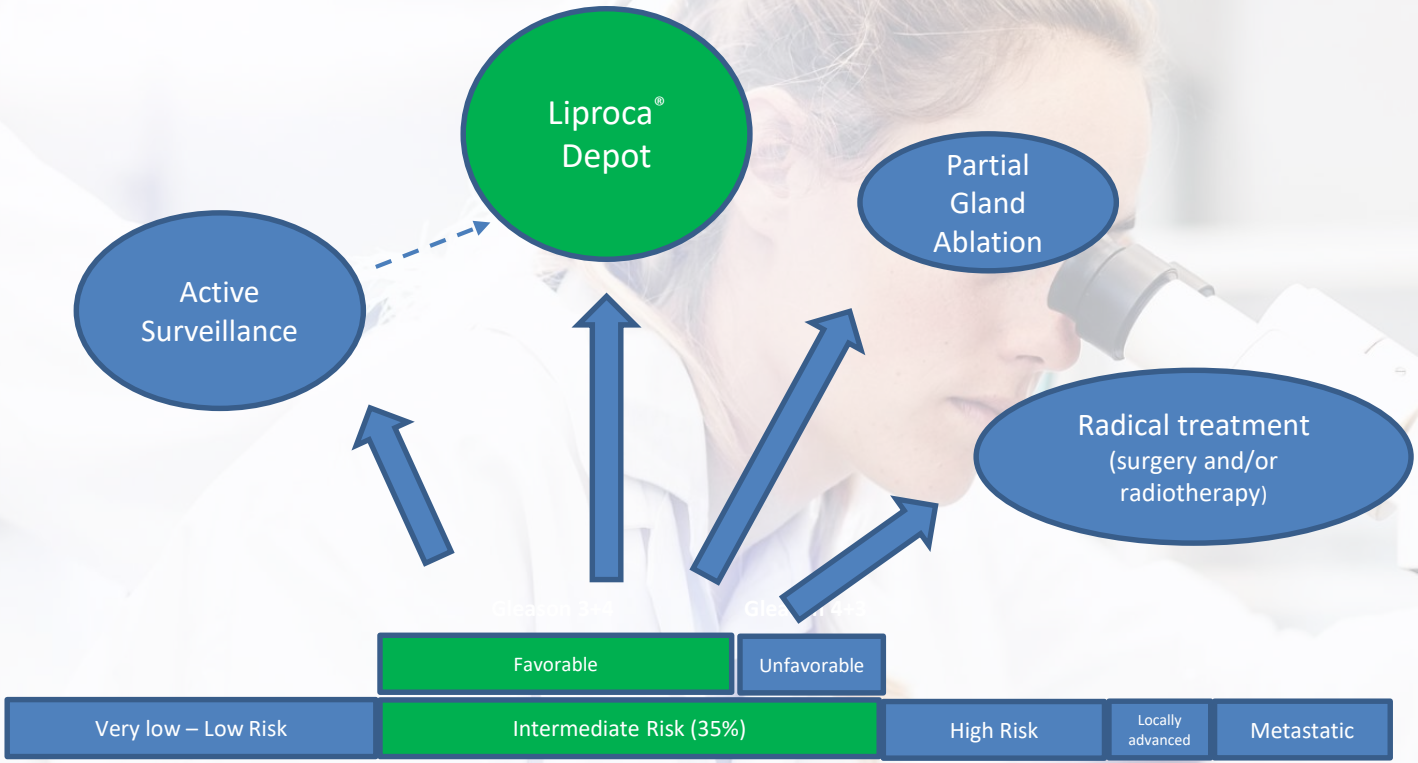
Liproca® Depot

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



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) } Part I
  - 45% of prostate volume (10 pat) } Part I
  - 16 mL (21 pat) } Part II
  - 20 mL (20 pat) } Part II
- 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

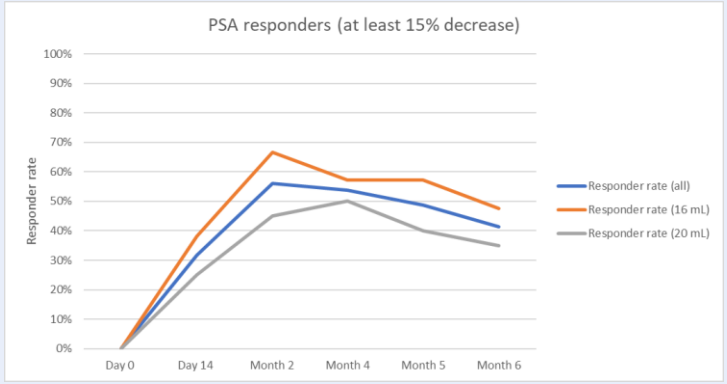
- To define the highest tolerable dose of Liproca® Depot
- To determine the level of PSA reduction at Month 5 for the doses in Part II

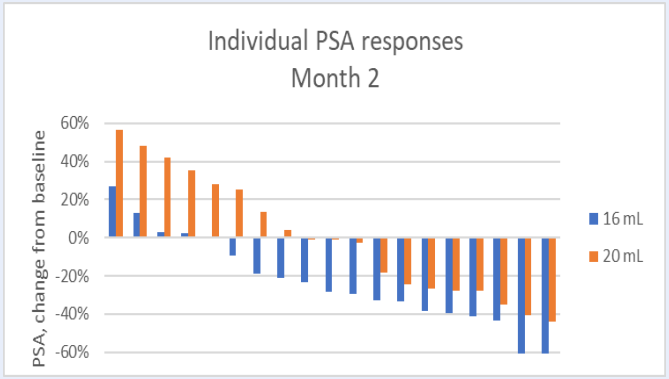
Secondary

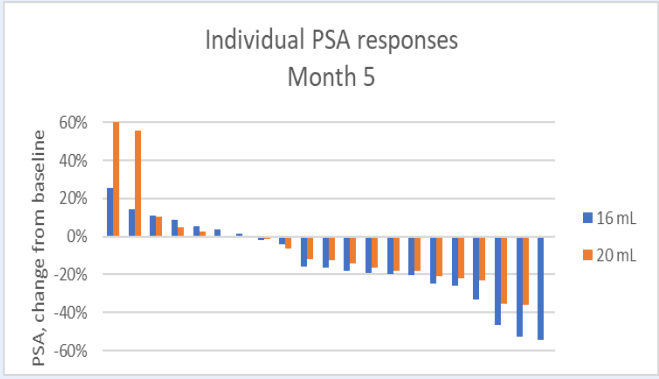
- PSA reduction at all timepoints
- Quality of Life
- Safety

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

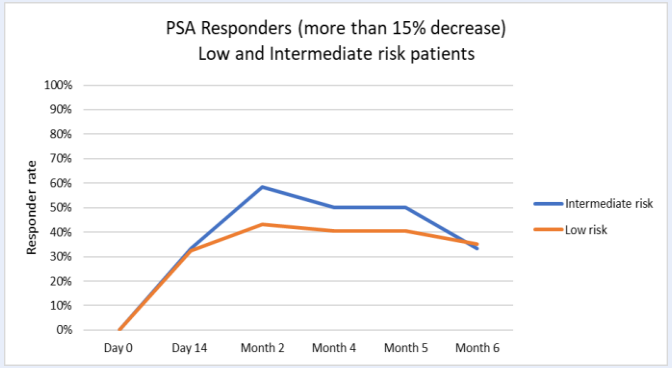






Relationship between serum PSA response and anti-cancer effect remains to be shown in phase III

Sub-group analysis



<u>Low risk patients</u>

Gleason score: ≤ 6

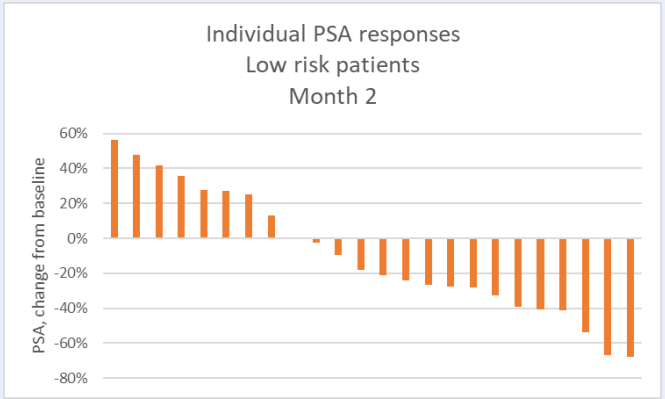
PSA: < 10 ng/ml

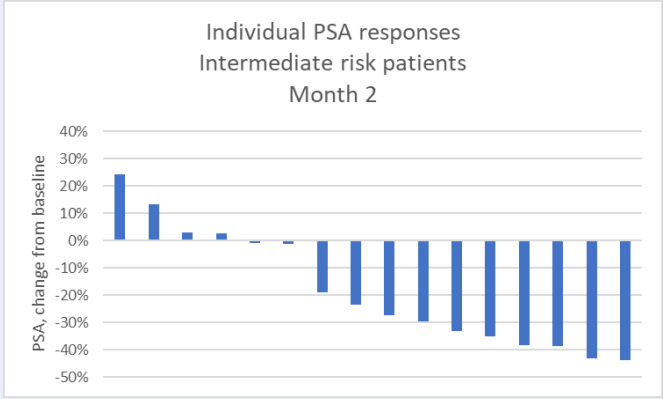
<u>Intermediate risk patients</u>

Gleason score: 7 and/or

PSA: 10-20 ng/ml

- A larger proportion of intermediate risk patients are PSA responders

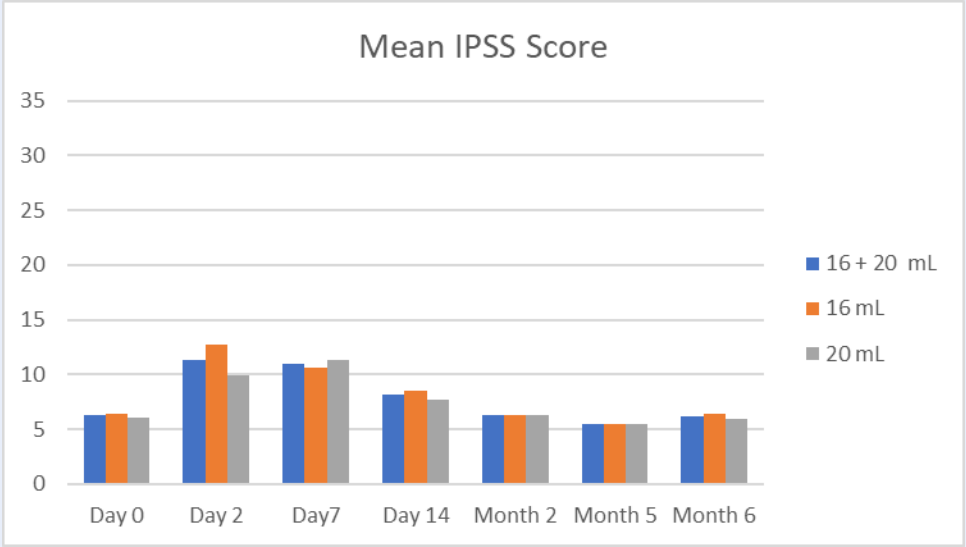




I-PSS score mild to moderate

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

0 - 7: Mild
8 - 19: Moderate
20 - 35: Severe



	Treatment Group									
	35 vol% N=10		45 vol% N=10		16 mL N=21		20 mL N=20		All N=61	
Any AE leading to withdrawal	0		0		0		0		0	
Any AE leading to death	0		0		0		0		0	
	All grades	Grade 3 or 4	All grades	Grade 3 or 4	All grades	Grade 3 or 4	All grades	Grade 3 or 4	All grades	Grade 3 or 4
Any AE	18	4	23	1	59	1	57	3	157	9
Most common Adverse Reactions										
Dysuria	1	0	3	0	6	0	5	0	15 (25%)	0
Haematuria					5	0	5	0	10 (16%	0
Urinary retention	3	2	1	1	1	0	3	0	8 (13%)	3 (5%)
Prostatitis					2	0	4	2	6 (10%)	2 (3%)
Serious Adverse Reactions										
Urosepsis		1								1 (2%)
Bacteremia		1								1 (2%)
Sepsis								1		1 (2%)
Prostatitis								2		2 (3%)

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 2nd injection of Liproca Depot

This approach warrants further evaluation as an adjunct to active surveillance in men with intermediate risk prostate cancer.

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