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The future of precision medicine

Prostate Cancer Panel

June 2018

Forward Looking Statements

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Certain of the statements made in this presentation are forward looking, such as those, among others, relating to future spending, future cash balances, future use of capital, the timing of initiation and completion of clinical trials, the enrollment period for, and availability and reporting, of data from ongoing and future clinical trials, the successful completion of clinical trials, estimates of the potential market opportunity for the company's product candidates, and the company's future development plans including those relating to the completion of pre-clinical development in preparation for possible future clinical trials and those relating to future IND filings. Actual results or developments may differ materially from those projected or implied in these forward-looking statements. Factors that may cause such a difference include risks that the company or independent investigators may experience delays in the initiation and completion of clinical trials (whether caused by competition, adverse events, patient enrollment rates, shortage of clinical trial materials, regulatory issues or other factors); risks that data from prior clinical trials may not be indicative of subsequent clinical trial results; risks related to the safety and efficacy of the company's product candidates; risks that early stage pre-clinical data may not be indicative of subsequent data when expanded to additional pre-clinical models or to subsequent clinical data; risks that evolving competitive activity and intellectual property landscape may impair the company's ability to capture value for the technology; risks that expectations and estimates turn out to be incorrect, including estimates of the potential markets for the company's product candidates, estimates of the capacity of manufacturing and other facilities required to support its product candidates, projected cash needs, and expected future revenues, operations, expenditures and cash position. More information about the risks and uncertainties faced by Endocyte, Inc. is contained in the company's periodic reports filed with the Securities and Exchange Commission. Endocyte, Inc. disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Two high value, next generation oncology platforms

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Radio-ligand Therapies (RLT)

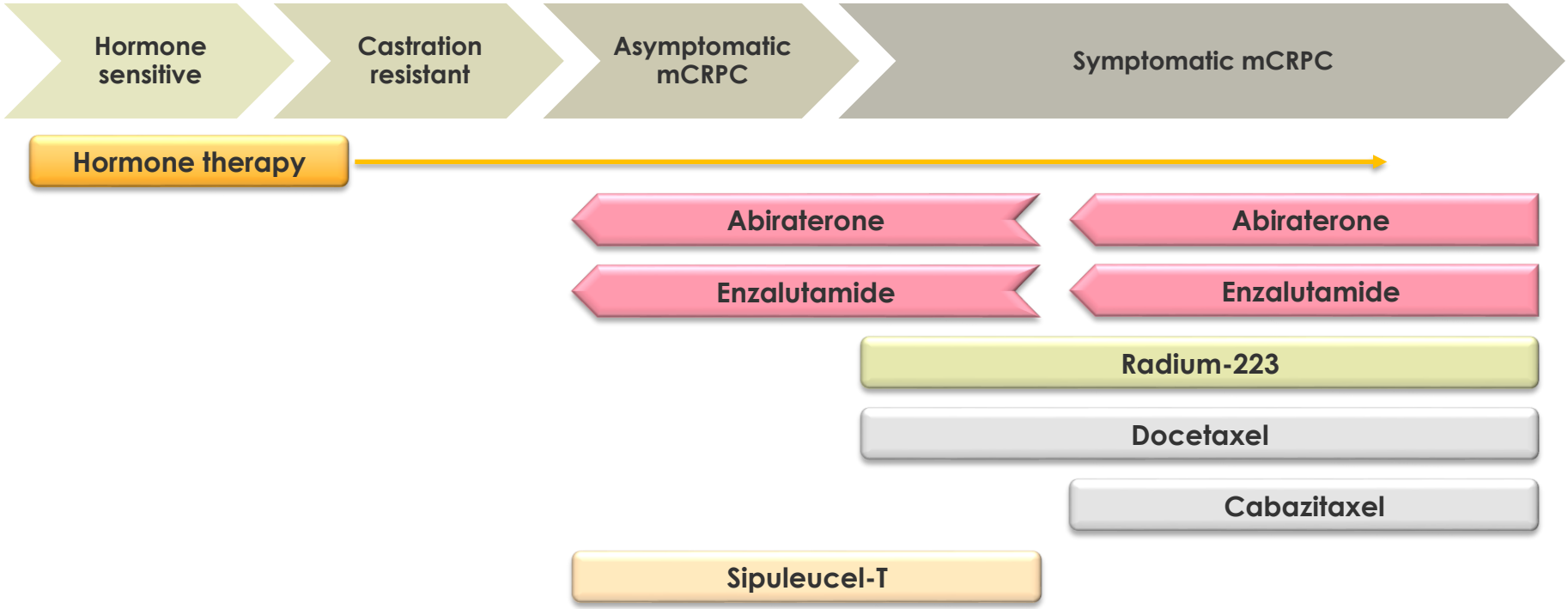
- Robust Ph 2 data for the treatment of mCRPC with ^{177}Lu-PSMA-617
- Differentiated MOA compared to current therapies for mCRPC
- Opportunity to build portfolio of RLT assets with new targets

Autologous Adaptor-Controlled CAR T Therapies

- Leverage expertise in CAR T Adaptor Molecule (CAM) technology to potentially address biggest challenges to current CAR T therapies
- Opportunity to build portfolio of CAMs with new targets

Experienced leadership team building key capabilities to support execution

Abiraterone and enzalutamide have moved forward, leaving gap and need for new mechanism



Strong rationale for development of radioligand therapy in mCRPC

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- Significant unmet need in abiraterone/enzalutamide refractory mCRPC
- Need for differentiated MOAs
- Extend the use of radiopharmaceuticals in mCRPC beyond the treatment of bone disease
- Molecular genetics will continue to gain traction, however, limited application (e.g., ~15% eligible for PARP inhibitors)
- Payors, physicians and patients desire targeted therapies and CDx for patient selection

^{177}Lu-PSMA-617 potential was evident in German compassionate use data

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German Multicenter Study Investigating ^{177}Lu-PSMA-617 Radioligand Therapy in Advanced Prostate Cancer Patients

Kambiz Rahbar, Hojjat Ahmadzadehfar, Clemens Kratochwil, Uwe Haberkorn, Michael Schäfers, Markus Essler, Richard P. Baum, Harshad R. Kulkarni, Matthias Schmidt, Alexander Drzezga, Peter Bartenstein, Andreas Pfestroff, Markus Luster, Ulf Lützen, Marlies Marx, Vikas Prasad, Winfried Brenner, Alexander Heinzel, Felix M. Mottaghy, Juri Ruf, Philipp Tobias Meyer, Martin Heuschkel, Maria Eveslage, Martin Bögemann, Wolfgang Peter Fendler and Bernd Joachim Krause

J Nucl Med. 2017;58:85-90.
Published online: October 20, 2016.
Doi: 10.2967/jnumed.116.183194

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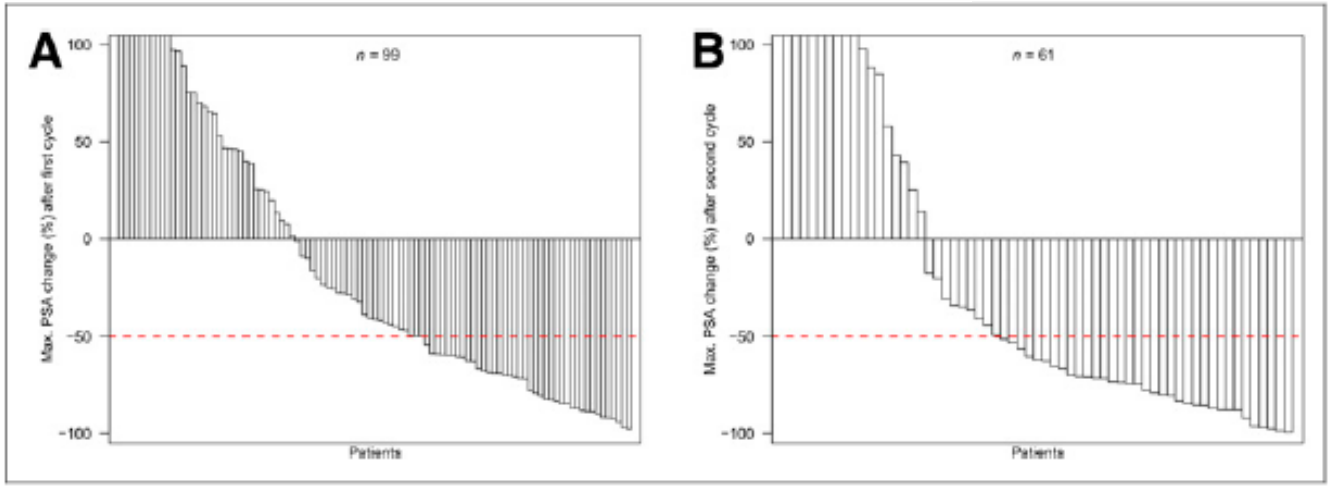

FIGURE 3. Waterfall plots of maximum PSA change (%) after first cycle (A) and after second cycle (B). PSA increase > 100% was cropped due to simplification.

Prospective clinical data confirmed early findings

Results presented at 2017 ESMO garner significant investigator attention[1]

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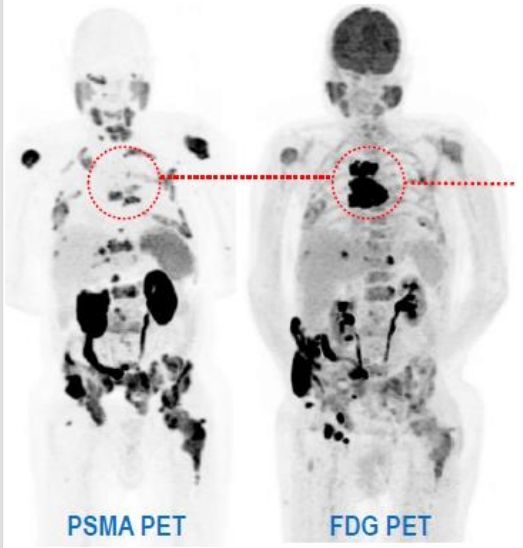
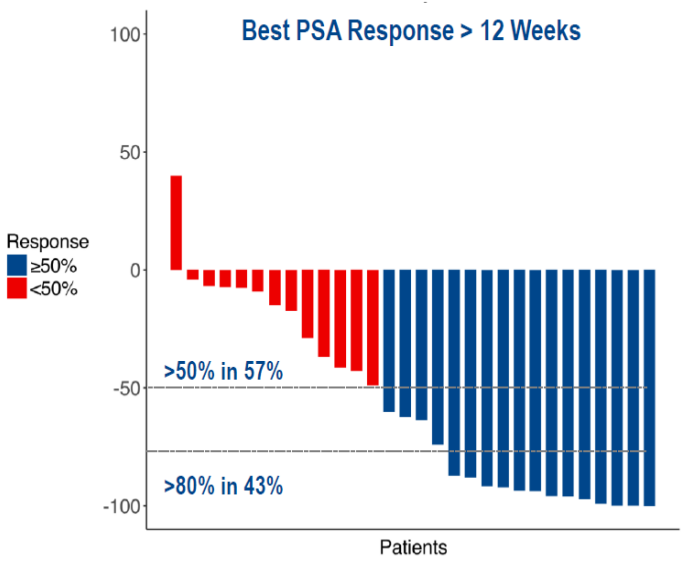
Refined Patient Selection



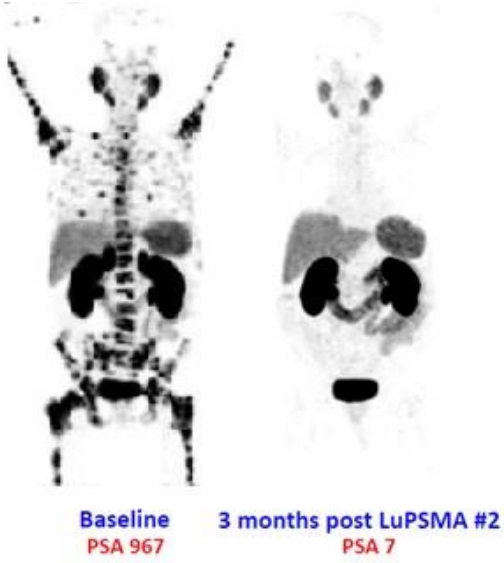
Patient excluded from trial. PSMA negative disease appears on FDG PET and not on PSMA PET.

Driving Response

- 57% >50 PSA reduction
- 71% RECIST response



Post Treatment Scan



PSMA positive disease not visibly detected from follow-up scan.

[1] Hofman, Michael (2017, Sept.). *Lutetium-177 PSMA (LuPSMA) theranostics phase II trial.* Presented at ESMO, Madrid, Spain.

THE LANCET Oncology publication expanded on ESMO findings

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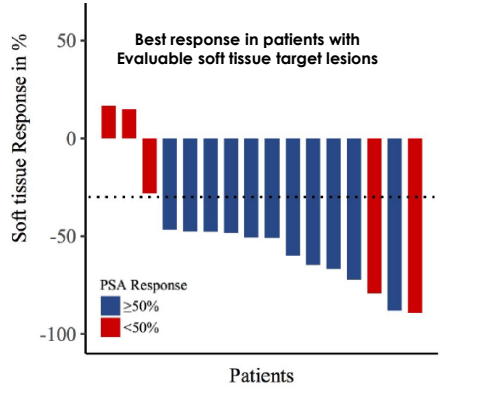
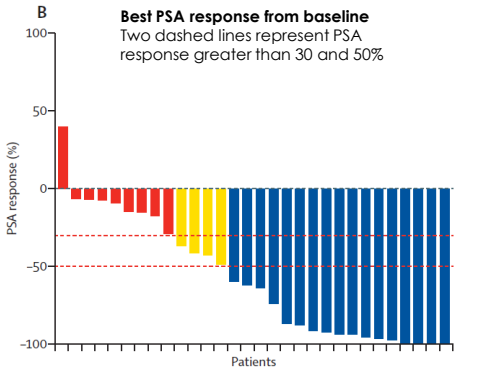
THE LANCET Oncology

[^{177}Lu]-PSMA-617 radionuclide treatment in patients with metastatic castration-resistant prostate cancer (LuPSMA trial): a single-centre, single-arm, phase 2 study

Michael S Hofman, John Violet*, Rodney J Hicks, Justin Ferdinandus, Sue Ping Thang, Tim Akhurst, Amir Iravani, Grace Kong, Aravind Ravi Kumar, Declan G Murphy, Peter Eu, Price Jackson, Mark Scalzo, Scott G Williams, Shahneen Sandhu*

Efficacy Measure	Sept 2017 ESMO	May 2018 Lancet Oncology
Best PSA>50% Reduction	57%	57%
Best PSA >80%	43%	43%
PSA ≥ 96% Reduction	Not reported	20%
PSA Progression Free Survival	6.3 mo	7.6 mo
RECIST Response	71%	82%
Median Overall Survival	12.7 mo	13.5 mo





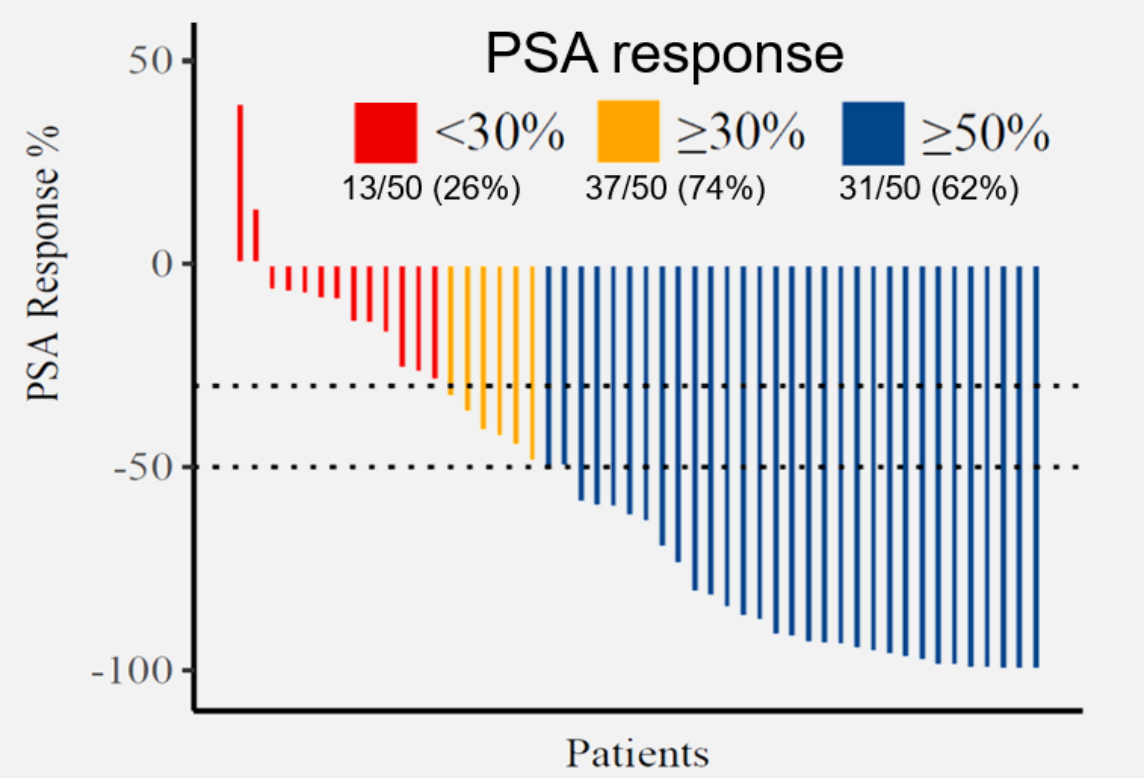
	Grade 1–2	Grade 3	Grade 4	Grade 1–2, attributed to LuPSMA*	Grade 3 attributed to LuPSMA*	Grade 4 attributed to LuPSMA*
Dry mouth	26 (87%)	0	0	26 (87%)	0	0
Lymphocytopenia	12 (40%)	13 (43%)	0	11 (37%)	11 (37%)	0
Thrombocytopenia	12 (40%)	5 (17%)	3 (10%)	8 (27%)	3 (10%)	1 (3%)
Fatigue	16 (53%)	1 (3%)	0	15 (50%)	0	0
Nausea	15 (50%)	0	0	15 (50%)	0	0
Anaemia	7 (23%)	7 (23%)	0	4 (13%)	4 (13%)	0
Neutropenia	12 (40%)	2 (7%)	0	8 (27%)	2 (7%)	0
Pain	8 (27%)	3 (10%)	0	5 (17%)	1 (3%)	0
Vomiting	10 (33%)	0	0	10 (33%)	0	0
Anorexia	8 (27%)	0	0	7 (23%)	0	0
Dry eyes	5 (17%)	0	0	5 (17%)	0	0
Weight loss	3 (10%)	0	0	3 (10%)	0	0
Disseminated intravascular coagulation	0	1 (3%)	0	0	0	0
Oculomotor nerve disorder	1 (3%)	0	0	1 (3%)	0	0
Spinal fracture	0	1 (3%)	0	0	0	0
Hip fracture	0	1 (3%)	0	0	0	0

Data are n (%). Grade 1–2 adverse events occurring in ≥10% of the cohort and all grade ≥3 adverse events are presented. There were two grade 5 adverse events not attributed to LuPSMA: pneumonia (n=1), hepatic failure (n=1). LuPSMA=lutetium-177 prostate-specific membrane antigen-617. *Possibly, probably, or definitely according to Common Terminology Criteria for Adverse Events.

Table 3: **Treatment-emergent adverse events**

[1] Hofman, Michael et al. The Lancet Oncology (2018, May)

Response rates sustained with trial expansion



(1) Hofman, Michael (2018, June). *Lutetium-177 PSMA617 theranostics in mCRPC: interim results of a phase 2 trial. ASCO 2018, Genituoruinary cancer P5040.*

PSA PFS and overall survival correlate to PSA response & compare favorably to historical benchmarks

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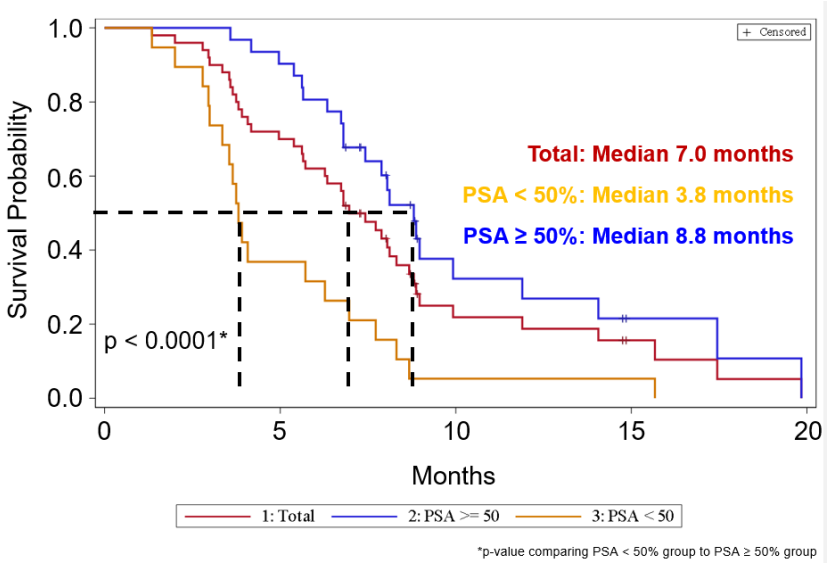
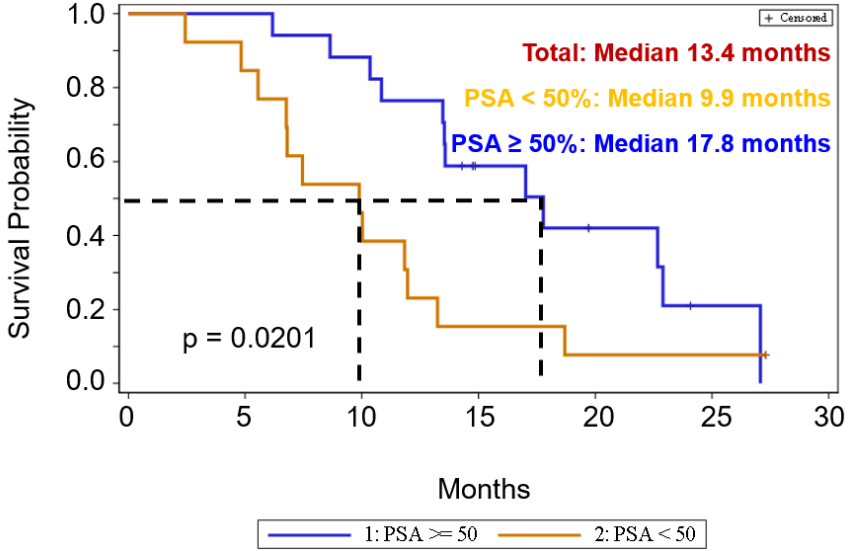
PSA PFS (50 patients)



Overall Survival (First 30 patients)



Differentiated mechanism of action yields consistent response independent of prior therapy

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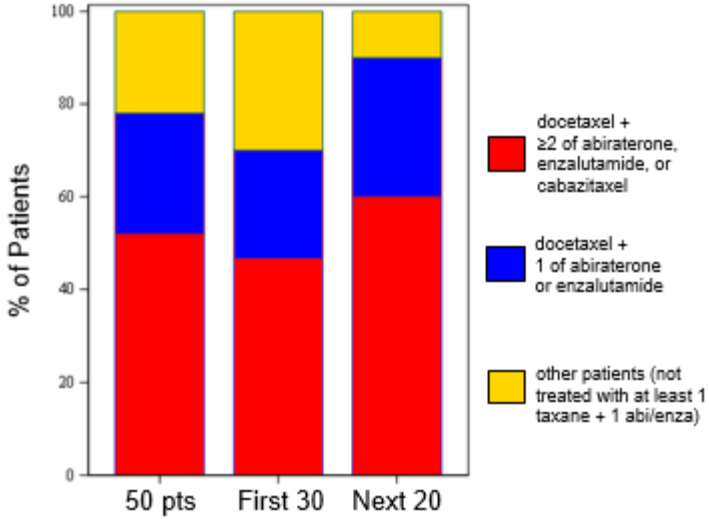
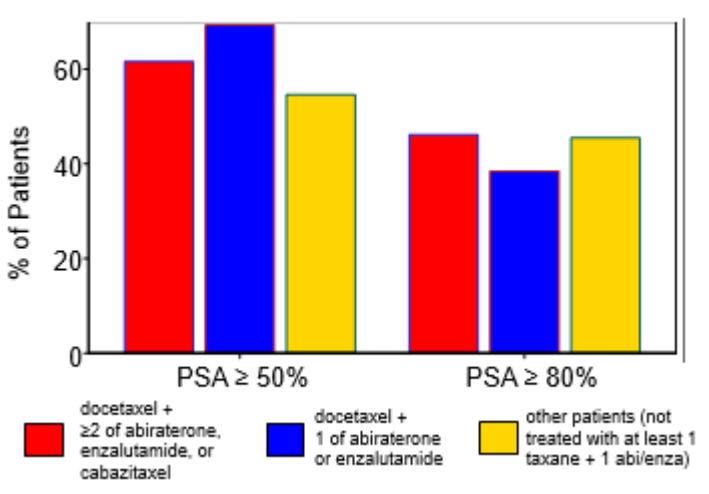
Most patients received 3 or more prior therapies in metastatic setting



Response rates similar for less pre-treated compared to most pre-treated patients



[1] Hofman, Michael (2018, June). *Lutetium-177 PSMA617 theranostics in mCRPC: interim results of a phase 2 trial. ASCO 2018, Genituoruinary cancer P5040.*

Pivotal phase 3 VISION trial design

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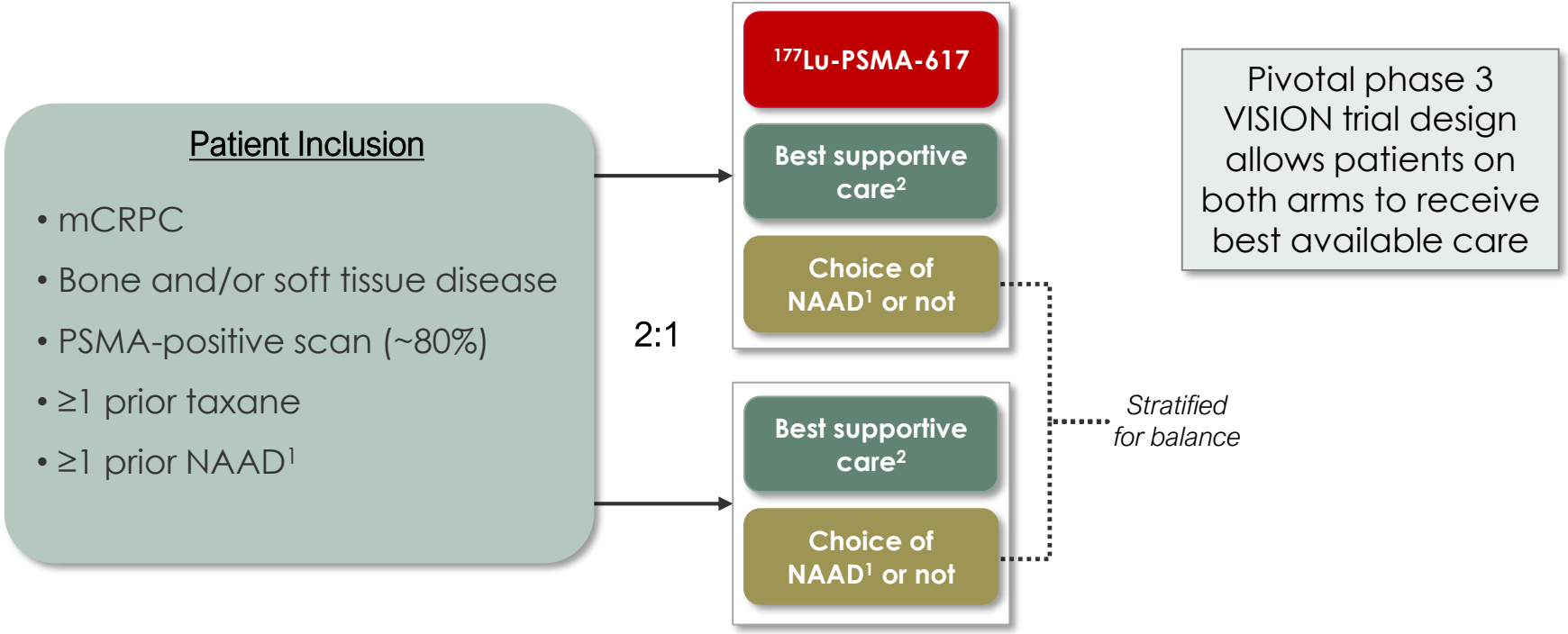
An international, prospective, open-label, multi-center, randomized Phase 3 Study of ^{177}Lu-PSMA-617 in treatment of patients with progressi**V**e PSMA-posit**I**ve meta**S**tat**I**c castrati**ON** resistant prostate cancer



1) NAAD = novel androgen axis drug = abiraterone or enzalutamide; 2) Best supportive care = palliative.

Large opportunity even in late-stage, metastatic setting

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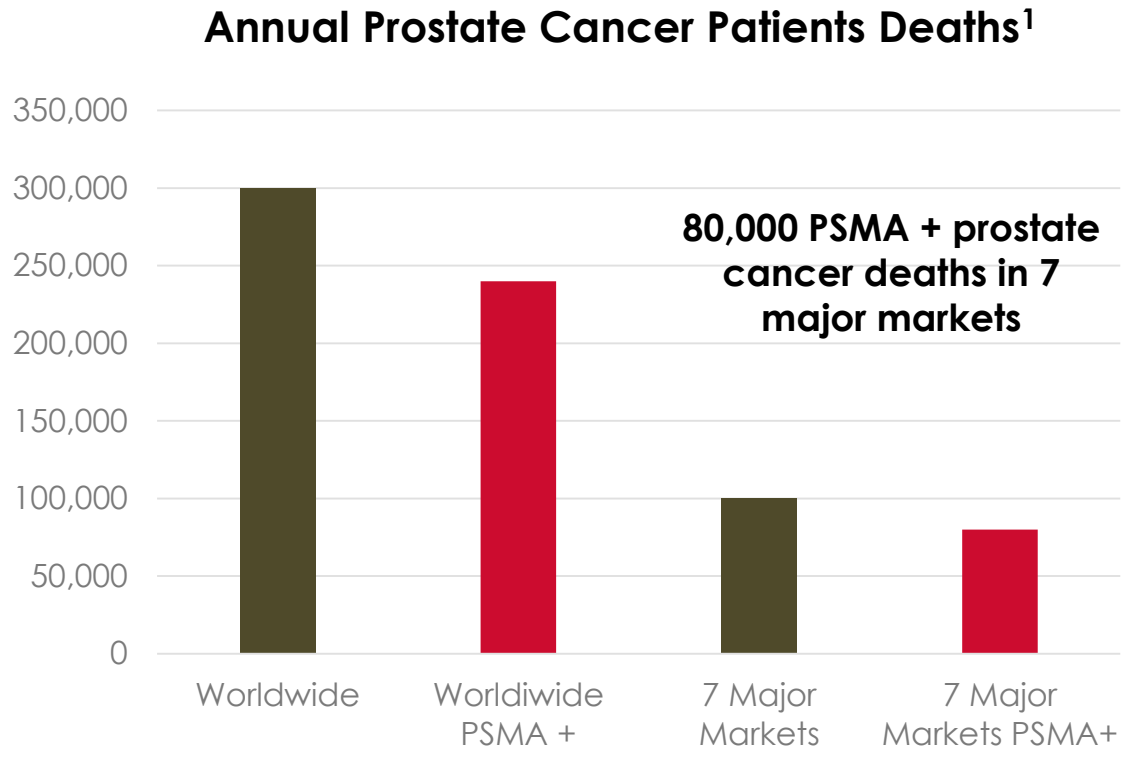

1) 2016 Facts and Figures, American Cancer Society, and International Agency for Research on Cancer, World Health Organization

We have a VISION

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Phase 3  **trial is recruiting**

Panel participants

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Oliver Sartor, MD

C.E. & Bernadine Laborde Professor for Cancer Research
Medical Director, Tulane Cancer Center

Johann S de Bono, MD

Regius Professor of Cancer Research
Professor, The Royal Marsden NHS Foundation Trust (UK)

Alison Armour, MD

Chief Medical Officer, Endocyte

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