IRONMAN

AN INTERNATIONAL REGISTRY TO IMPROVE OUTCOMES IN MEN WITH ADVANCED PROSTATE CANCER
INTERNATIONAL REGISTRY TO IMPROVE OUTCOMES IN MEN WITH ADVANCED PROSTATE

2017 Advanced Prostate Cancer Consensus Conference

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Dana-Farber/Harvard Cancer Center
366,000 men die of prostate cancer globally each year

• Leading cause of cancer death in 29 countries
• Most deaths due to metastatic, castration-resistant prostate cancer (mCRPC)
• Significant disparities in prostate cancer mortality

Clinical landscape for advanced prostate cancer is changing

• 6 new approved therapies and many others in development
• Evolving understanding of the tumour genetics of advanced prostate cancer
• Biological variation in how men with metastases respond to new therapies
• Urgent need for understanding quality of life in advanced prostate cancer patients
With a **vision** of describing variations in patient management, experiences, and outcomes in a globally representative population of men with advanced prostate cancer,

IRONMAN’s **Study Objectives** are:
1. To describe the **practice patterns** of drugs for treatment of advanced prostate cancer internationally;

2. To assess whether **specific treatment patterns** are associated with reductions in clinically significant events;

3. To identify associations between treatment sequences or combinations with **overall survival**;

4. To define the **patient experience** of men with advanced prostate cancer and identify unmet needs in their treatment;

5. To identify **clinical and molecular subtypes** that predict how men respond to treatment patterns.
Prospectively recruit 5,000 patients with advanced prostate cancer

- Metastatic hormone-sensitive prostate cancer (N=500)
- M0 and M1 castration-resistant prostate cancer (N=4,500)
- Study population synergizes with Movember GAP4 population

Recruit internationally to achieve a population-based, diverse cohort of advanced prostate cancer patients
# International Study Sites

<table>
<thead>
<tr>
<th>Country</th>
<th>Lead Site PI</th>
<th>N</th>
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<tbody>
<tr>
<td>Australia</td>
<td>Ian Davis</td>
<td>500</td>
</tr>
<tr>
<td>Brazil</td>
<td>Andre Fay</td>
<td>500</td>
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<tr>
<td>Canada</td>
<td>Kim Chi</td>
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<tr>
<td>Ireland</td>
<td>Ray McDermott and Stephen Finn</td>
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<tr>
<td>Sweden</td>
<td>Anders Bjartell and Ove Andrén</td>
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<tr>
<td>Switzerland</td>
<td>Aurelius Omlin and Silke Gillessen</td>
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<tr>
<td>UK</td>
<td>Simon Choudhury and Deborah Enting</td>
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<tr>
<td>US</td>
<td>IRONMAN team</td>
<td>2200</td>
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STUDY SCHEMA

**BASELINE**
- Blood
- Demographic Data
- Epidemiological Data
- Treatment History
- Clinical & Pathology
- PROMs
- Physician Questionnaires

**FOLLOW-UP**
(Min. 3 Years)
- Patient Reported Outcomes
- Physician Questionnaire (subset of sites)
- Overall Survival
- Treatments During Follow-up
- Clinically significant events

*Whole blood, serum, cell free DNA, buffy coat / RNA
*Or at progression
The primary endpoints for the study will be:
Overall survival (minimum 3 year follow up)
PROMs

Secondary endpoints for the study will be:
Clinically significant events: hospitalization, cardiovascular events, secondary cancers, non-malignant bone fractures, other incident medical events
Blood biomarkers
Symptomatic skeletal events
Changes in treatments, Physician Questionnaires
PATIENT REPORTED OUTCOME (PROM) AND EXPERIENCE (PREM) MEASURES

Collecting PROMs every 3 months in first 2 years, 6 months after
Collect PREMs every 12 months

Web-based leveraging Movember TrueNth platform

Domains of quality of life
- Physical and emotional health
- Fatigue, pain
- Sleep, depression, anxiety
- Memory and cognitive decline
- Urinary and sexual health
# BIOREPOSITORIES

## Blood
- Baseline and at treatment change (or Year 1)

## Tissue
- Informed consent to collect diagnostic tissue

<table>
<thead>
<tr>
<th>Assay</th>
<th>Collection method at clinical site</th>
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<tbody>
<tr>
<td>Plasma</td>
<td>Heparin tube</td>
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<tr>
<td>Whole blood</td>
<td>EDTA</td>
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<tr>
<td>cfDNA &amp; Buffy Coat</td>
<td>Streck tube</td>
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<tr>
<td>RNA</td>
<td>PAXgene tube</td>
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<tr>
<td>International Meeting</td>
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<td>Protocol Finalization</td>
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<td>Contracts to Sites</td>
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<td>First patient accrued</td>
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<tr>
<td>Last patient accrued</td>
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<tr>
<td>Last patient 3-year follow-up</td>
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WHAT MAKES THIS REGISTRY UNIQUE

- **Size**: 5000 patients and population-based
- **Scale**: International, multiple countries, diverse populations
- **Patient populations**: CRPC and mHSPC
- **Biomarkers**: Serial blood specimens
- **Patient-centered** data collection using TrueNth
- **Accessibility to multiple constituents**
- **Diverse funding support**
DIRECT TRANSLATION OF IRONMAN KNOWLEDGE

1. Immediate understanding of differences in treatment patterns in advanced prostate cancer across populations, ethnicities and countries
2. Immediate understanding of treatment decision making by physicians in advanced disease
3. Immediate understanding of unmet needs of men with advanced disease
4. Immediate picture of changing PROMs across course of disease progression and variability by population and treatments
5. Evidence basis for planning randomized trials to test optimal treatment patterns and sequences that improve outcomes
6. Evidence basis for understanding disparities in outcomes to plan for effective interventions
7. Evidence basis for identifying new molecular markers that will improve outcomes for men with advanced cancer
ACKNOWLEDGEMENTS

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