There’s a new way to kill tumors

by eradicating the immune suppressive nature of the TME

IO Biotech is a Phase 3 company leading the way

IO BIOTECH

November 2022

Forward Looking Statements

Certain information contained in this presentation includes “forward-looking statements”, within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, related to our business plan, clinical trials and regulatory submissions. We may, in some cases, use terms such as “may,” “should,” “would,” “expects,” “plans,” “anticipates,” “could,” “intends,” “target,” “projects,” “contemplates,” “believes,” “estimates,” “predicts,” “potential” or “continue” or other words that convey uncertainty of the future events or outcomes to identify these forward-looking statements. Our forward-looking statements are based on current beliefs and expectations of our management team that involve risks, potential changes in circumstances, assumptions, and uncertainties. Any or all of the forward-looking statements may turn out to be wrong or be affected by inaccurate assumptions we might make or by known or unknown risks and uncertainties. These forward-looking statements are subject to risks and uncertainties including risks related to the execution of our business plan, success and timing of our clinical trials or other studies and the other risks set forth in our filings with the U.S. Securities and Exchange Commission. For all these reasons, actual results and developments could be materially different from those expressed in or implied by our forward-looking statements. You are cautioned not to place undue reliance on these forward-looking statements, which are made only as of the date of this presentation. We undertake no obligation to publicly update such forward-looking statements to reflect subsequent events or circumstances.

Investment Highlights

Differentiated Platform – T-win®	• Proprietary T-win® designed to activate pre-existing T cells • MOA stimulates pre-existing T cells against both tumors *and* immunosuppressive cells in the TME • Infiltrating T cells modulate the TME into an anti-tumor proinflammatory environment
Strong Phase 1/2 Data for IO102-IO103	• 1st line melanoma combo with nivolumab: 46.8 months OS, 50% CR and 22.5 months median PFS* (n=30) • Current SOC ~45-58% ORR and ~7-12 months PFS • Breakthrough Therapy Designation (BTD) granted based on Phase 1/2 data
Phase 3 in 1st Line Advanced Melanoma	• Phase 3 initiated: FPI May 2022; enrollment ongoing for global multi-site trial • Combination with pembrolizumab in 1st line advanced melanoma • Durable efficacy with favorable safety
Multiple Upside Opportunities in Other Solid Tumors	• Phase 2 basket trial initiated: FPI April 2022; currently enrolling several cohorts, such as head and neck cancer and lung cancer; initial data expected in 2022 • Early-stage pipeline targeting additional immunosuppressive mechanisms
Strong Cash Position	• Nasdaq listing (IPO) in Nov. 2021 • Cash: ~$151M (9-30-22) • Sufficient runway into mid 2024

IO BIOTECH

* As of October 2022

Experienced Leadership

Mai-Britt Zocca, PhD

President and CEO

- 20 years industry and oncology drug development experience
- PhD in medicine (Immuno-Oncology)
- Serial life sciences entrepreneur, corporate strategy, financing and management, board member

Amy Sullivan, MBA

Chief Financial Officer

- 30 years experience in life sciences industry
- Extensive experience with corporate strategy and investor relations for early through commercial-stage biotech
- Deep U.S. network and experience
- Raised >$2B in capital, incl. public equity in U.S. and EU

Eva Ehrnrooth, MD PhD

Chief Medical Officer

- 20+ years in oncology & drug development
- Board certified clinical oncologist with a PhD in molecular oncology
- Successfully led multiple phase 3 oncology programs across multiple solid tumor indications leading to global registration

Muhammad Al-Hajj, PhD

Chief Scientific Officer

- 18+ years in oncology drug discovery
- PhD in molecular genetics with postdoctoral training in cancer and stem cell biology
- Leadership in oncology and immunotherapy translational sciences within pharma and biotech

Ideally Positioned in the Evolving Melanoma Landscape

Benefit-Risk Ratio	• Only P3 competitor in the desired “quadrant” – High PFS, high ORR, low AE’s
In Phase 3	• First mover advantage with targets of IO102-IO103
Broad Applicability	• Consistent efficacy across melanoma subgroups • Potential for use among patients regardless of PD-L1 expression

Competitive Advantages

Triple therapy – Strong position to be considered in a potential new paradigm

BEMPEG learnings – Ratio of PD-L1 positive/negative patients can be an important determinant of efficacy

Opdualag learnings (Nivo-LAG-3) – Effect only in a subset of patients (PD-L1 low)

Pipeline Overview

Program	Line of therapy/ indication	Pre-clinical	Phase 1	Phase 2	Phase 3	Anticipated Next Milestone
Candidate: **IO102–IO103** Targets: **IDO, PD-L1**	**First Line Advanced Melanoma**		Melanoma (1)			• Continue enrolling Phase 3
	First Line Solid Tumors(1)		• Lung (NSCLC)(4) • Head & Neck (SCCHN)(4) • Bladder (UBC)(4)			• Continue enrolling Phase 2 "basket" trial • Initial data by end of 2022 in one indication • Additional data in 2023
	Neo-adjuvant / Adjuvant Solid Tumors(1)		• Melanoma • Head & Neck (SCCHN)(4) • Indication TBD			• Initiate Phase 2 "basket" trial in in 2H 2023
Candidate: **IO112** Target: **Arginase 1**	**Solid Tumors**	Indications TBD(3) IO102-IO103-IO112				• File IND for IO112 in 2023

1. *In combination with pembrolizumab*
2. *In combination with an anti-PD-1 monoclonal antibody therapy*
3. *Expected to be developed in combination with third party drugs or biologics*
4. *NSCLC = non-small cell lung cancer, UBC = urothelial bladder cancer, SCCHN = squamous cell carcinoma of the head and neck*

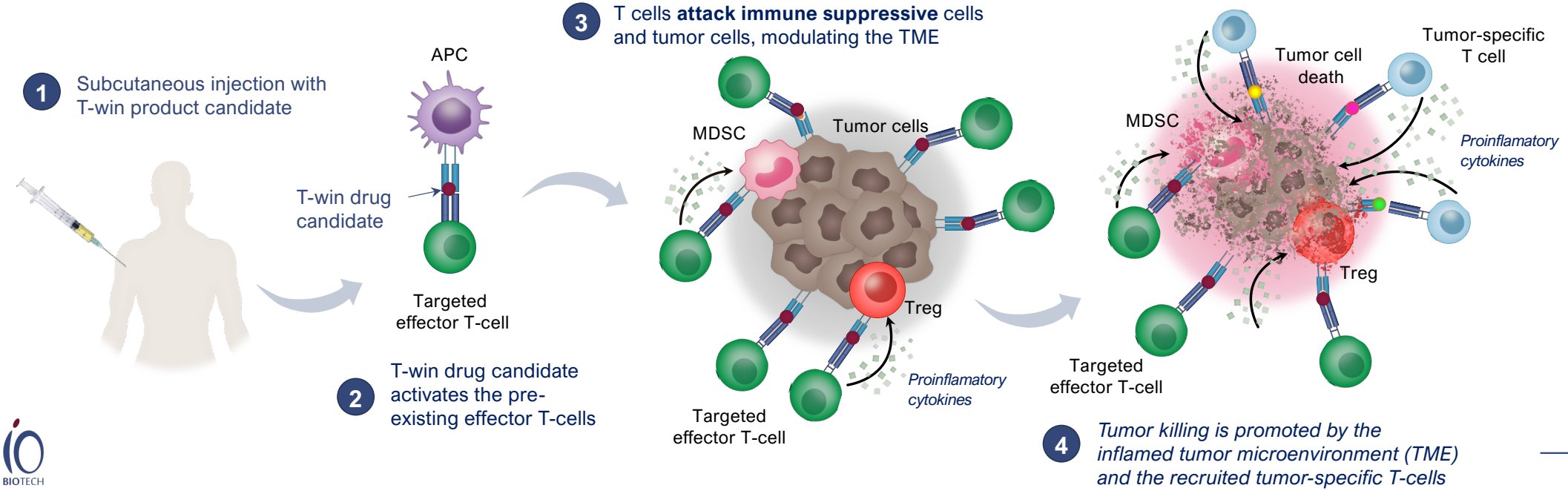
6

T-win® Platform:

Novel Approach to Modulate the Immune System to Treat Multiple Solid Tumor Types

T-win Treatment Triggers Potent Immune Response Within TME

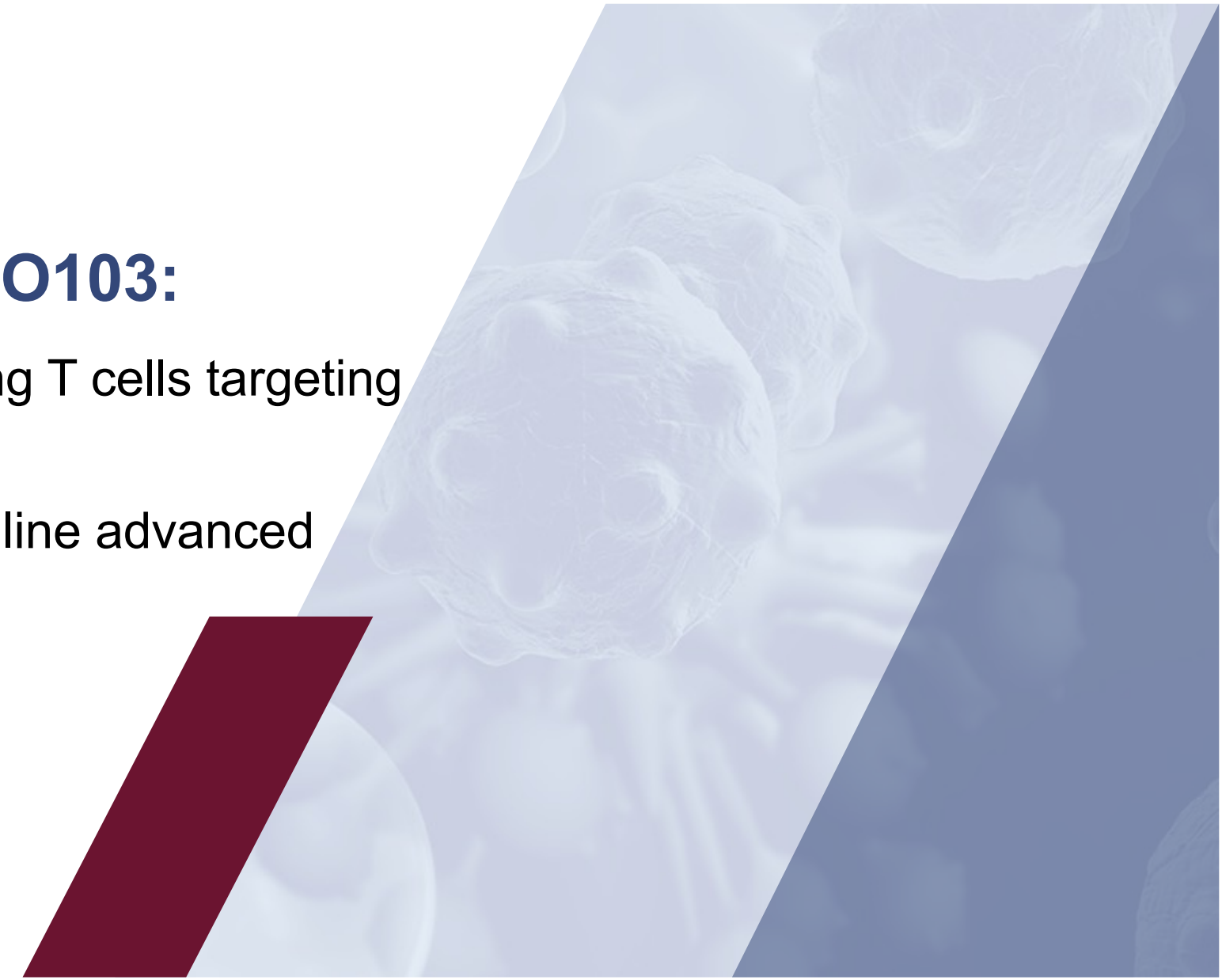
- T-win candidates target high value TME proteins (e.g. IDO, PD-L1, arginase)
- Treatment induces potent immune response within the TME to enhance killing of tumor cells:
  - **Direct killing** of target-expressing immunosuppressive cells in the TME
  - Modulation of the TME into a more **pro-inflammatory, anti-tumor environment**
- Appears to have overcome limitations of previous approaches



IO102-IO103:

Activates pre-existing T cells targeting IDO and PD-L1

Phase 3 trial for 1st line advanced melanoma



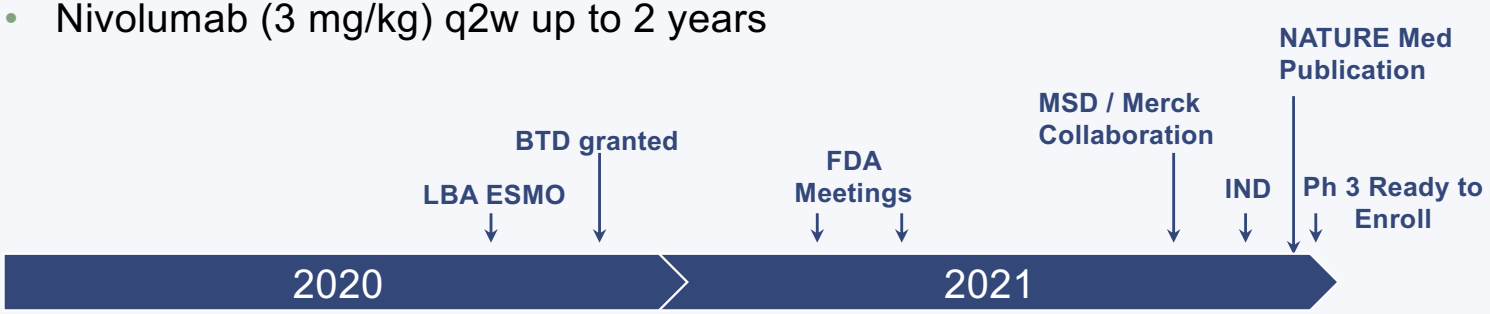
Phase 1/2 Trial in Metastatic anti-PD-1 Naïve Melanoma

TRIAL POPULATION:

- Measurable disease
- First-line metastatic melanoma
- Anti PD-1 / PD-L1 naïve
- Any PD-L1 and BRAF status
- N = 30

IO102 + IO103 plus nivolumab

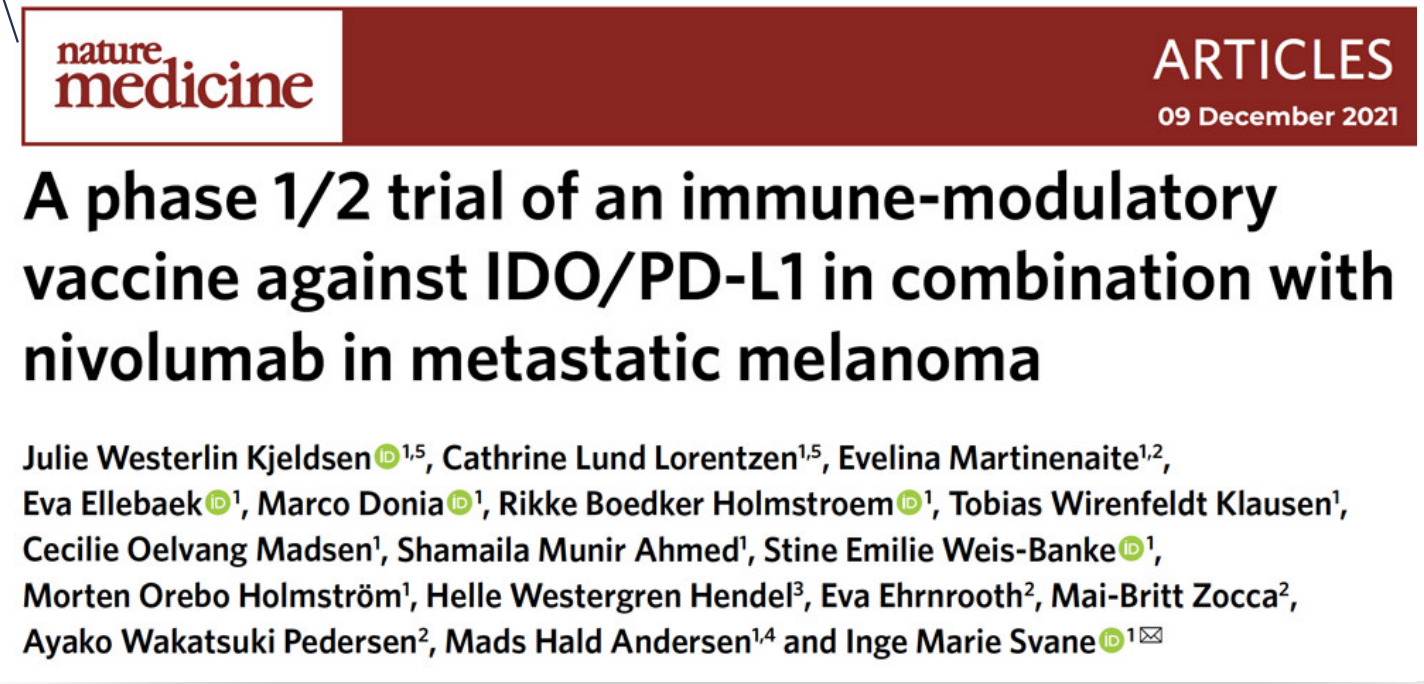
- **Primary objective:** safety and feasibility, secondary objective immunogenicity and tertiary objective clinical efficacy
- IO102-IO103 (100 µg of each peptide) + montanide adjuvant (max. 15 treatments, up to 47 weeks)
- Nivolumab (3 mg/kg) q2w up to 2 years



Phase 1/2 Trial – Published in Nature Medicine December 2021

October 2022 Data Cut:

- *median follow up: 31.7 months*
- *mOS: 46.8 months*
- *mPFS: 22.5 months*
- *CR: 50%*
- *ORR: 73.3% as previously reported*



nature medicine

ARTICLES

09 December 2021

A phase 1/2 trial of an immune-modulatory vaccine against IDO/PD-L1 in combination with nivolumab in metastatic melanoma

Julie Westerlin Kjeldsen[1,5], Cathrine Lund Lorentzen[1,5], Evelina Martinenaite[1,2], Eva Ellebaek[1], Marco Donia[1], Rikke Boedker Holmstroem[1], Tobias Wirenfeldt Klausen[1], Cecilie Oelvang Madsen[1], Shamaila Munir Ahmed[1], Stine Emilie Weis-Banke[1], Morten Orebo Holmström[1], Helle Westergren Hendel[3], Eva Ehrnrooth[2], Mai-Britt Zocca[2], Ayako Wakatsuki Pedersen[2], Mads Hald Andersen[1,4] and Inge Marie Svane[1]✉

Phase 1/2 Trial: Baseline Demographics

Patient Characteristics

Majority of patients had one or more poor prognostic factors:

- **43% PD-L1 negative**
- **60% M1c**
- **37% high LDH**

Baseline characteristics are largely similar to those in other trials

Patients	n = 30
Age (years)	
Mean (range)	70 (46-85)
Sex	
Female	14 (47%)
Male	16 (53%)
ECOG Performance status	
0	26 (87%)
1	4 (13%)
PD-L1 status	
Positive (≥1%)	17 (57%)
Negative (< 1%)	13 (43%)
BRAF status (%)	
Mutant (V600E, V600K)	11 (37%)
Wild-Type or non-V600 mutation	19 (63%)

Patients	n = 30
Stage (8th edition JACC) (%)	
M1a	6 (20%)
M1b	6 (20%)
M1c	18 (60%)
LDH (%)	
Normal	19 (63%)
Elevated > ULN	11 (37%)
Liver metastases (%)	
Yes	10 (33%)
No	20 (67%)
Number of metastatic sites	
1	7 (23%)
2-3	17 (57%)
> 3	6 (20%)

BIOTECH

Data as published in Nature Medicine December 2021

Phase 1/2 Trial: Unprecedented ORR and CRR

Data as published in Nature Medicine December 2021

Data externally confirmed

ORR and CRR externally confirmed with subsequent blinded review

Best Overall Response	Investigator Review	
Responders – ORR*	**24**	**80%**
Best Overall Response Rate (RECIST 1.1)**	**22**	**73.3%**
Complete Response Rate	14	46.7%
Partial Response Rate	8	26.7%
SD	0	0%
PD	6	20%
Total	**30**	**100%**
ORR – PDL1 negative only (n = 13)	7	54%

- *Ipi / Nivo ORR: 58% and CRR: 22% (Larkin 2019)*
- *Nivolumab or pembrolizumab ORR 45% - 46% (Larkin 2019 and Robert 2019)*

Data as published in Nature Medicine December 2021

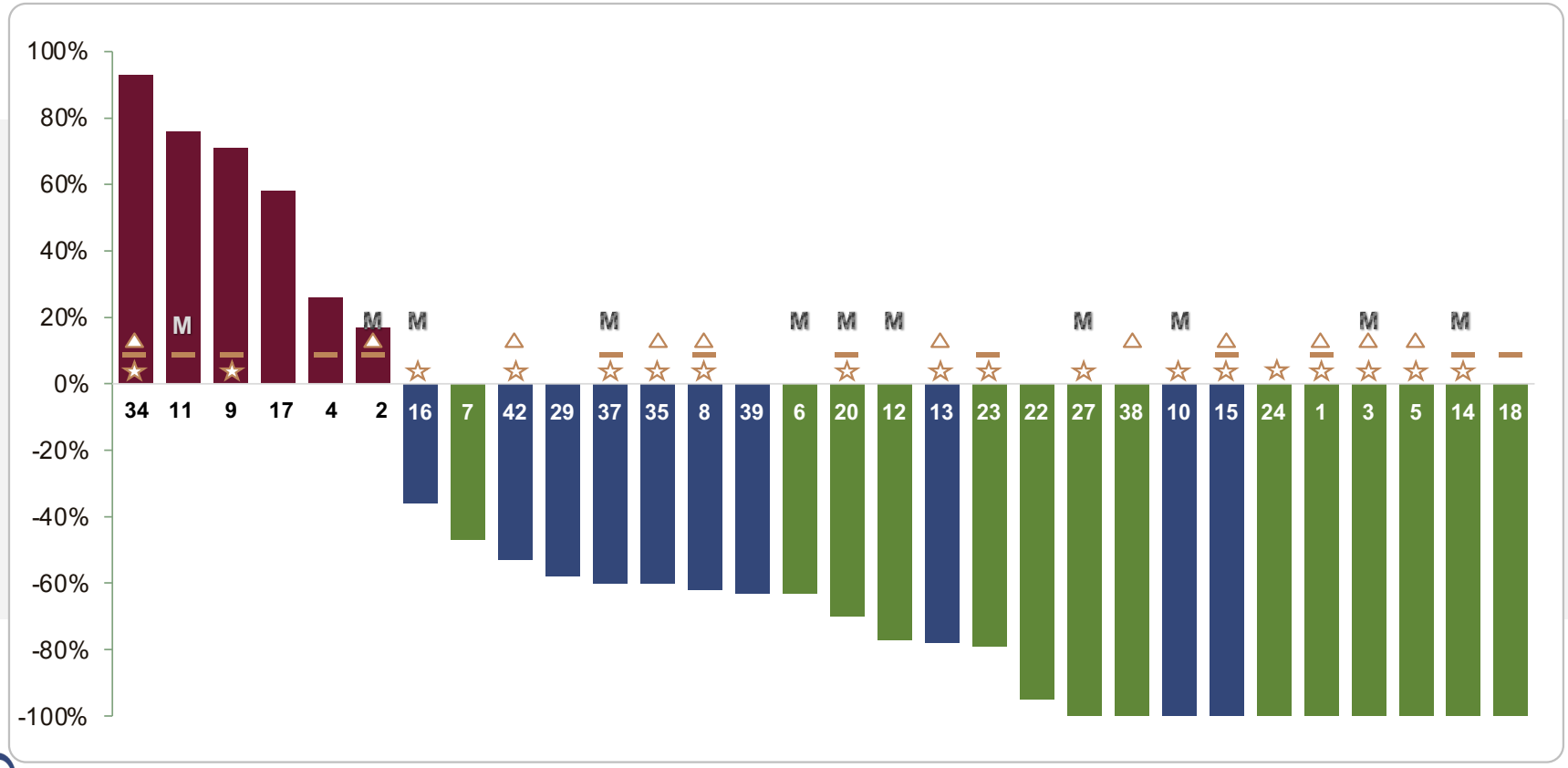
**Two of the 24 responding patients progressed before subsequent radiological confirmation*

*** Radiologically confirmed at subsequent imaging*

Phase 1/2: Change in Target Lesion Size by Patient

Data as published in Nature Medicine December 2021

Even patients with poor prognostic factors show clinical benefit

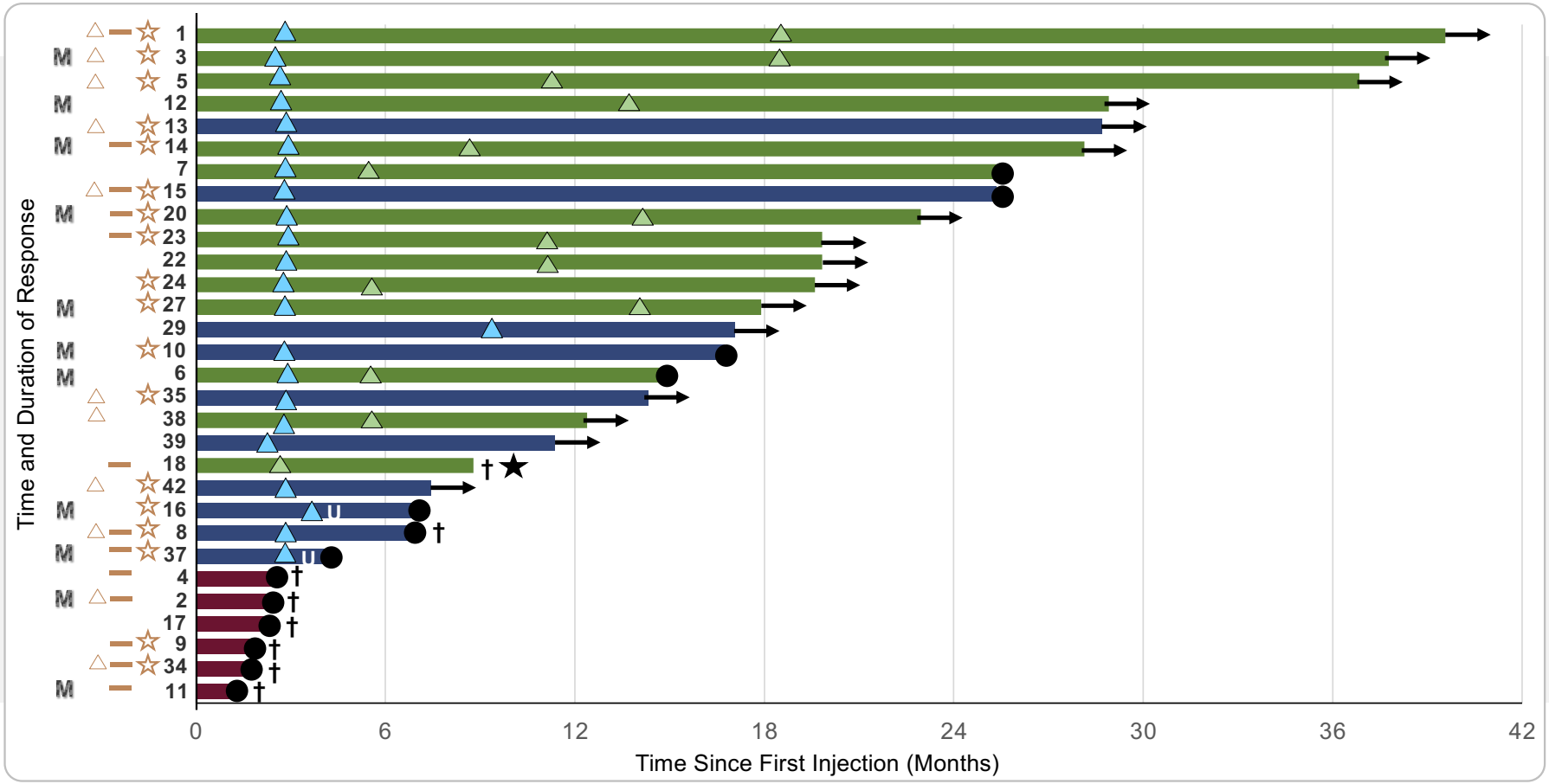


Source: Kjeldsen, et. al. ***Nature Medicine****; Dec 9, 2021*

Updated February 2021

Phase 1/2: Rapid and Durable Responses

Data as published in Nature Medicine December 2021; at that time median duration of response not reached

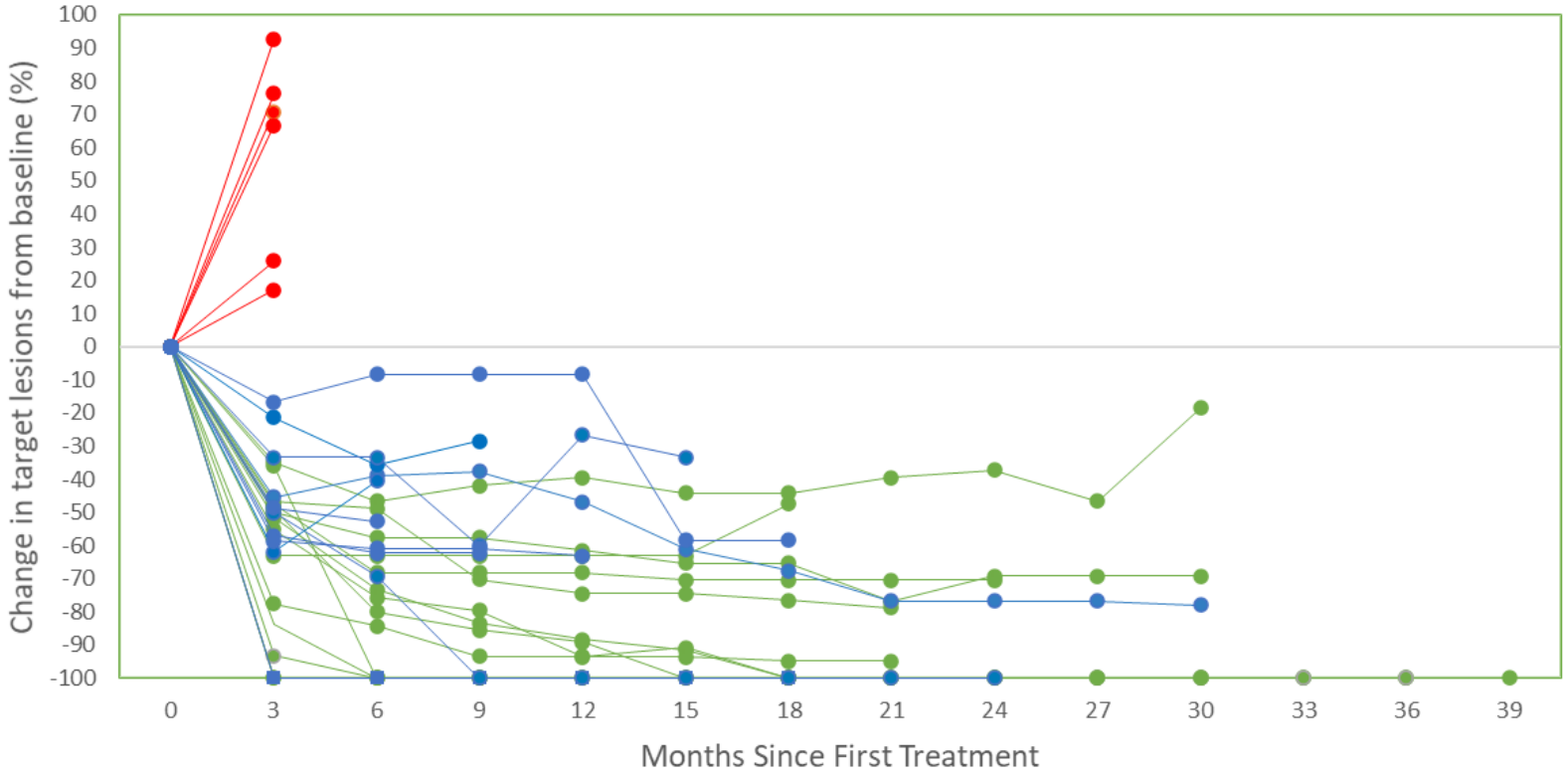


Updated February 2021

Source: Kjeldsen, et. al. ***Nature Medicine****; Dec 9, 2021*

Phase 1/2: Deep and Durable Responses

Data as published in Nature Medicine December 2021



Source: Kjeldsen, et. al. ***Nature Medicine****; Dec 9, 2021*
Updated February 2021

Phase 1/2 vs. Contemporanous Matched Historical Controls

- **Significantly higher ORR than matched historical controls – suggesting that the response observed with the combination therapy was unlikely to be due to patient selection bias**
- **Efficacy results in the matched historical cohort were comparable with Phase 3 benchmarks**

Comparison with contemporary anti PD-1 treated patients from the National Danish Metastatic Melanoma Database

938 anti PD-1 treated patients were extracted

218 patients were eligible for comparison and matching

60 patients were found to match

The ORR (79.3% vs. 41.7%) and CR (41.4% vs. 12%) - was significantly higher

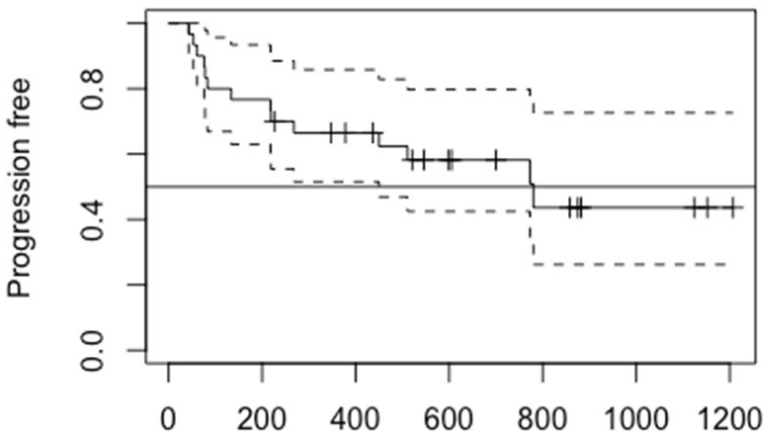
BOR	Phase 1/2 % (95% CI) (Jan'20)	Matched dataset % (95% CI)
N	29	60
CR	41.4% (25% - 60%)	12% (6% - 22%)
ORR	79.3% (61% - 90%)	41.7 % (31% - 53.3%)

CR = complete response, ORR = overall response rate

Phase 1/2: Median PFS of 25.3 Months and OS Not Reached

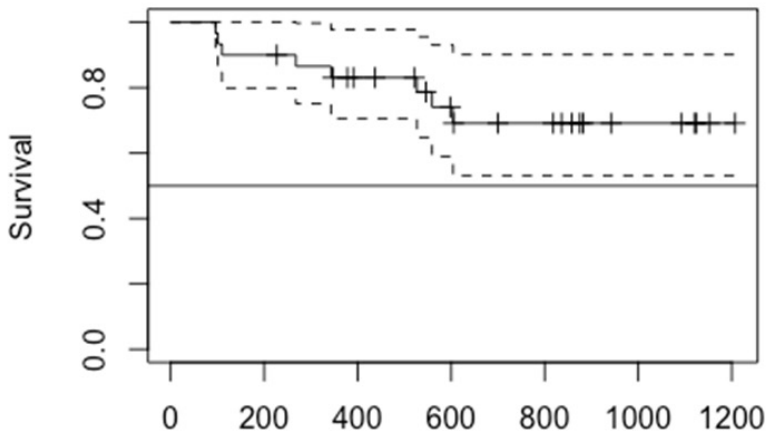
Data as published in Nature Medicine December 2021

Progression Free Survival



- **mPFS = 780 days (25.6 months)**
- **Median duration of follow-up = 27.3 mo**

Overall Survival



- **mOS (N = 30) Not yet reached**

- *Median PFS of 25.6 months in February 2021*
- *Median PFS of 25.3 months in June 2021*
- *Median PFS of 22.5 months in October 2022*
- *Ipi / Nivo mPFS 12 months*
- *mOS Ipi / Nivo > 60.0 mo (95%CI, 38.2 to NR). mOS nivolumab = 36.9 mo (95% CI, 28.2 to 58.7)*

Larkin NEJM 2019

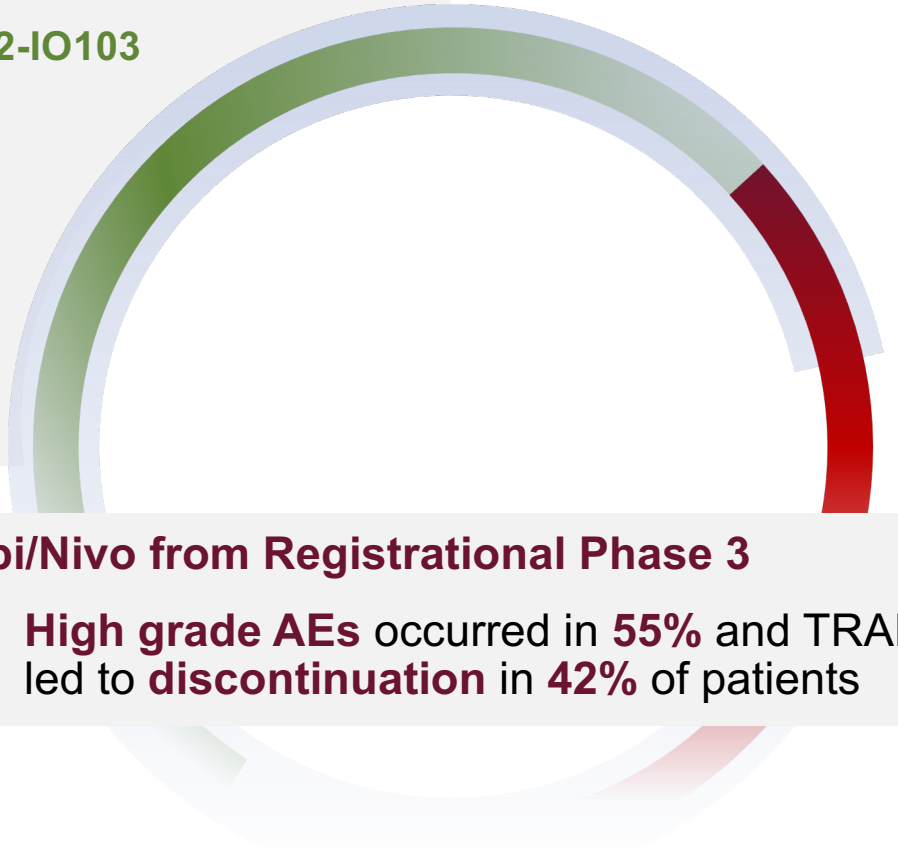
Phase 1/2: Attractive Safety Profile

No AEs on top of anti PD-1 monotherapy

No increase in Grade 3+ AE's when combining IO102-IO103 with anti PD-1

High Grade (CTCAE 3-5) = 17%
Comparable with CM-066 (15%) and KN-006 (17%)

TRAEs Leading to Discontinuation = 17%
CM-066 (9%) and KN-006 (10%)



Ipi/Nivo from Registrational Phase 3

- **High grade AEs** occurred in **55%** and TRAEs led to **discontinuation** in **42%** of patients

All the AEs leading to treatment discontinuation were considered by the investigator to be related to nivolumab. The rate of treatment-related adverse events leading to discontinuation of both nivolumab and IO102-IO103 was 17%.

Phase 3 Design and Registration Path in 1L Advanced Melanoma

Trial design and BLA submission strategy discussed and main features confirmed with FDA

- International randomized Phase 3 trial (N = 300)
- Trial name: IOB-013 / KN-D18
- Primary endpoint PFS (by independent review committee (IRC))
- Potential for accelerated approval under BTD, based on interim ORR (reviewed by IRC), supported by PR, CR, and descriptive PFS data
- Full approval could be based on PFS (reviewed by IRC) at the final analysis supported by data on OS
- ClinicalTrials.gov Identifier: NCT05155254

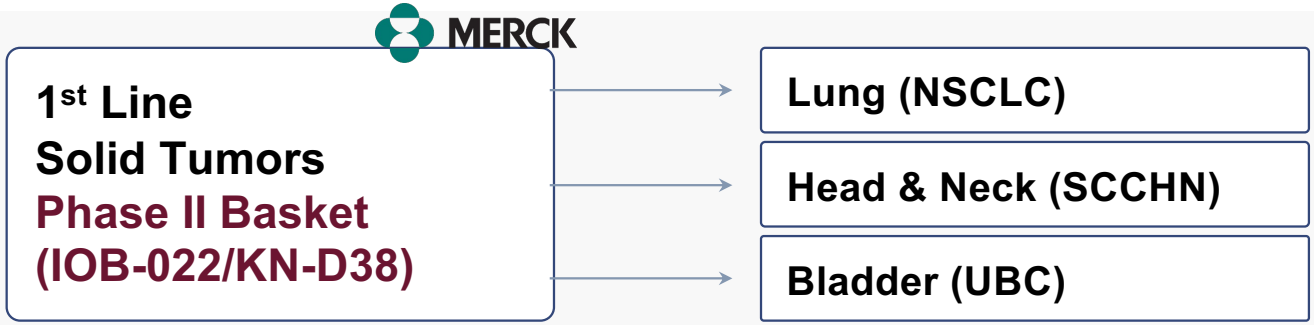
FDA U.S. FOOD & DRUG ADMINISTRATION

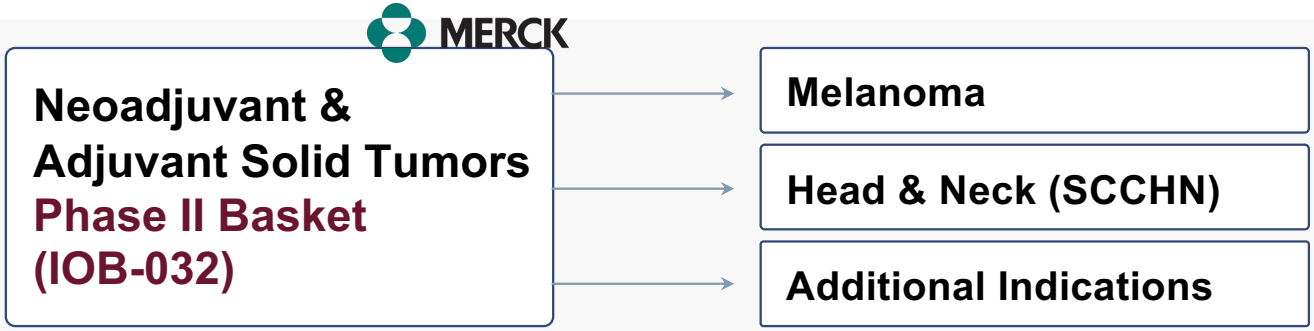
Breakthrough Therapy Designation Granted December 2020

DRR = durable response rate, CRR = complete response rate

IO102-IO103 – Expansion Opportunities

- Multiple potential opportunities in various cancer settings with limited anti-PD-1 mAb efficacy or tolerability and toxicity concerns





Cash Runway into Mid 2024

- **Cash position: ~**$151 million (as of 9-30-22)
- Phase 3 with dual epitope (IO102-IO103) in 1st line advanced melanoma
- Phase 2 basket trial with dual epitope in first line solid tumors
- Phase 2 basket trial with dual epitope in neoadjuvant / adjuvant solid tumors
- Phase 1/2 trial with multi-epitope (w. IO112) in 1st line, solid tumor
- Continue to build the organization in Denmark and the US

Key Upcoming Data Readouts / Milestones

Multiple data readouts in 2022-2023 across indications

IO102-IO103 (PD-L1, IDO) - Dual Epitope			2022	2023
Phase 3	**Melanoma**	First-line advanced	• First patient randomized/dosed – May	-
Phase 2 Basket Trials	**NSCLC SCCHN, UBC**	First-line metastatic	• First patient dosed – April • **Data in one indication by year end**	• **Data**
	TBD	Neo-adjuvant / adjuvant		Initiate Phase 2 in one indication in 2H2023
IO112 (Arginase) – Multiple Epitope Combinations				
Phase 1/2	**Solid tumors**	-		File IND in 2023

These are not projections; they are targets/goals and are forward-looking, subject to significant business, economic, regulatory and competitive uncertainties and contingencies, many of which are beyond the control of the Company and its management, and are based upon assumptions with respect to future decisions, which are subject to change. Actual results will vary and those variations may be material. For discussion of some of the important factors that could cause these variations, please consult the "Risk Factors" section of the preliminary prospectus. Nothing in this presentation should be regarded as a representation by any person that these goals will be achieved and the Company undertakes no duty to update its goals.

Data readout

Trial Initiation / Other Event

BIOTECH

Thank you