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Risk Factors

The risks presented below are certain of the general risks related to the Company, IGNU and the proposed business combination (the "Business Combination") and such list is not exhaustive. The list below has been prepared solely for the purposes of the Transaction and not for any other purposes. You should carefully consider these risks and uncertainties and should carry out your own diligence and consult with your own financial and legal advisors concerning the risks and suitability of an investment in the Transaction before making an investment decision. Risks relating to the business of the Company will be disclosed in future documents filed or furnished by the Company and IGNU with the SEC, including the documents filed or furnished in connection with the Business Combination. The risks presented in such filings will be consistent with those that would be required for a public company in its SEC filings, including with respect to the business securities of the Company and IGNU and the Business Combination, and may differ significantly from, and be more exhaustive than, those presented below. All references to "we," "us" or "our" refer to the business of the Company.

Competitive and Business Risks

- We have incurred and expect to continue to incur operating losses and may not establish and maintain profitability.
- We are a global company and are subject to the risks and uncertainties of conducting business outside the United States. While international expansion is one of our growth objectives, we may not be able to materialize available growth opportunities or guarantee that we will successfully integrate those opportunities into our existing business.
- The success of our business is highly dependent on the existence and maintenance of intellectual property rights in the products and services we create.
- If we fail to maintain, protect or enforce our intellectual property rights, the value of our brand and other intangible assets may be diminished, and our business, results of operations, financial condition and prospectus could be negatively impacted.
- In order to support the growth of our business, we may need to seek capital through new equity or debt financings, and such sources of additional capital may not be available to us on acceptable terms or at all.
- We may enter into collaborations, joint ventures, strategic alliances or partnerships with third parties that may not result in the development of commercially viable solutions or the generation of significant future revenues.
- We operate in highly competitive markets and face competition from large, well-established healthcare and pharmaceutical providers with significant resources, and, as a result, we may not be able to compete effectively. If we are unable to compete effectively, we will not be able to establish our products and services in the marketplace, and as a result, our business may not be profitable.
- We are dependent on our ability to recruit, retain and develop a large, highly skilled and diverse workforce. We must evolve our culture in order to successfully grow our business.
- We are substantially dependent on the success of our product candidates and cannot guarantee that any of our product candidates will successfully complete any planned or ongoing clinical trials, receive regulatory approval, or be successfully commercialized.
- We may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.
- Our future growth may depend on our ability to identify and develop product candidates and if we do not successfully identify and develop product candidates or integrate them into our operations, we may have limited growth opportunities.
- If we cannot demonstrate an acceptable safety and toxicity profile for our product candidates, we will not be able to continue our clinical trials or obtain approval for those product candidates.
- Changes in product candidate manufacturing or formulation may result in additional costs or delay.
- We may be sued for infringing the intellectual property rights of others.
- We face significant competition from other pharmaceutical and biotechnology companies, academic institutions, government agencies, and other research organizations. Our operating results will suffer if we fail to compete effectively.
- If any of our current or future product candidates do not achieve broad market acceptance, the revenues that we generate from their sales will be limited.
- It is difficult and costly to protect our proprietary rights and as a result we may not be able to ensure their protection. In addition, patents have a limited lifespan and will eventually expire.
- We may be unable to adequately prevent disclosure of trade secrets and other proprietary information.

Global Market Risks

- Our business may be adversely affected by geopolitical and other risks associated with operations outside of the U.S. and, as we continue to expand internationally, we may incur higher than anticipated costs and may become more susceptible to these risks.
- Our business may be adversely impacted by U.S. and global market and economic conditions.
- Potential tariffs or trade wars could increase the cost of our products, which could adversely impact the competitiveness of our products and our financial results.
- We face certain challenges and risks to our international business that may adversely affect our strategy.
- We incur risks related to our international business due to currency exchange rate fluctuations that could impact our financial results and financial position.

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Risk Factors

Regulatory and Compliance Risks

- If safety and efficacy data for our product candidates, a reference drug, or published literature does not satisfactorily demonstrate safety and efficacy to the FDA or EMEA, or if the FDA, EMEA and other regulators do not permit us to rely on the data of a reference drug or published literature, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.
- The regulatory approval processes of the FDA and comparable foreign authorities are lengthy, time consuming, and inherently unpredictable. If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals, we will not be able to commercialize our product candidates as expected, and our ability to generate revenue will be materially impaired.
- Failure to obtain marketing approval in international jurisdictions would prevent our product candidates from being marketed abroad.
- The FDA or EMEA may determine that any of our current or future product candidates have undesirable side effects that could delay or prevent their regulatory approval or commercialization.
- If we experience delays or difficulties in the enrollment of patients in clinical trials, our receipt of necessary regulatory approvals could be delayed or prevented.
- Regulatory approval is limited by the FDA or comparable foreign regulatory authorities to those specific indications and conditions for which clinical safety and efficacy have been demonstrated, and we may be subject to fines, penalties, injunctions, or other enforcement actions if we are determined to be promoting the use of our products for unapproved or “off-label” uses, resulting in damage to our reputation and business.
- We are, and if any of our product candidates receive regulatory approval, will continue to be subject to ongoing obligations and continued regulatory review, which may result in significant additional expense. Additionally, any of our product candidates, if approved, could be subject to labeling and other restrictions and market withdrawal and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products.
- If we or third parties with whom we partner or contract fail to comply with applicable laws and regulations, we could be subject to liability and our business could be harmed.
- Changes in laws or regulations, or a failure to comply with any laws and regulations, may adversely affect our business and results of operations.
- We could be subject to challenges by U.S. and foreign tax authorities that could result in additional taxes and penalties.
- Tax changes, including tax reform in the United States, could affect the Company’s effective tax rate and future profitability.

Post-Business Combination Risks

- If the benefits of the Business Combination do not meet the expectations of investors or securities analysts, the market price of the Company’s common stock may decline.
- An active trading market for the Company’s shares of common stock may not be available on a consistent basis to provide stockholders with adequate liquidity. The stock price may be volatile, and the stockholders could lose a significant part of their investment.
- There can be no assurance that the common stock issued in connection with the Business Combination will be approved for listing on Nasdaq following the closing, or that we will be able to comply with the continued listing standards of Nasdaq.
- The Company has broad discretion in how it uses the net proceeds from the Business Combination and the Company may not use them effectively.
- The Company may be subject to securities litigation, which is expensive and could divert management attention.
- Because the Company has no current plans to pay cash dividends for the foreseeable future, you may not receive any return on investment unless you sell your shares for a price greater than which you paid for them.
- If, following the Business Combination, securities or industry analysts do not publish or cease publishing research or reports about the Company, its business, or its market, or if they change their recommendations regarding the Company’s securities adversely, the price and trading volume of the Company’s securities could decline.
- Future sales and issuances of the Company’s common stock or rights to purchase the Company’s common stock, including pursuant to the Company’s equity incentive plans, or other equity securities or securities convertible into the Company’s common stock, could result in additional dilution of the percentage ownership of the Company’s stockholders and could cause the stock price of the Company’s common stock to decline.
- Warrants will become exercisable for the combined company’s common stock, which could increase the number of shares eligible for future resale in the public market and result in dilution to the Company’s stockholders.
- Investors in the Transaction will experience immediate and substantial dilution.
- We may issue shares of preferred stock in the future, which could make it difficult for another company to acquire us or could otherwise adversely affect holders of our common stock.

COVID-19 Pandemic Risks

- Our business operations, financial condition, results of operations and cash flows may be adversely affected by the effects of health epidemics, pandemics, or outbreaks of infectious diseases, including the recent COVID-19 pandemic

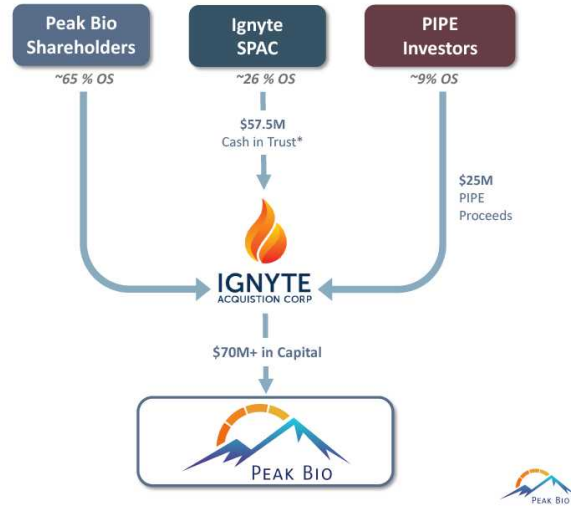
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Transaction Structure and Illustrative Pro Forma Ownership

- **Peak Bio** will be acquired by **Ignyte Acquisition Corp. ("IGNY")**
 - Expected closing: **Q3 2022**
 - Approximate post-transaction enterprise value: **~\$205M** (at \$10.00 per share)
 - PIPE size: **\$25M**
 - Approximate cash at closing: **\$72.5M*+**
- * Assumes no redemptions of trust account (\$57.5M) post merger, actual redemptions may vary, and does not reflect any fees or expenses incurred in connection with the transaction.

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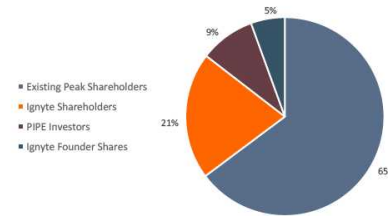


Transaction Overview

Sources and Uses ¹	
Sources	Amount
Cash Held in SPAC Trust ²	\$ 57,500,000
PEAK Shareholder Equity Rollover ³	\$ 180,000,000
PIPE	\$ 25,000,000
Total Sources	\$ 262,500,000
Uses	Amount
Equity Issued to Peak Bio Shareholders	\$ 180,000,000
Net Cash to Balance Sheet ²	\$ 72,500,000
Transaction Costs ⁴	\$ 10,000,000
Total Uses	\$ 262,500,000

Illustrative Pro-Forma Valuation	
Shares ²	27,787,500
Share Price	\$10.00
Pro-Forma Equity Value	\$ 277,875,000
(-) Pro Forma Cash ^{2,4}	\$ 72,500,000
Pro Forma Enterprise Value	\$ 205,375,000

Illustrative Pro-Forma Ownership



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 1. Assumes \$10 share price 2. Assumes no redemptions, actual redemptions may vary 3. Existing Peak shareholders will be issued 18 million shares 4. Estimate of transaction expenses



Why We are Excited About The Ignyte / Peak Bio Merger

Peak Bio is a vision of key pH Pharma Executives who aggressively acquired key assets and raised capital to develop them which now will be the "backbone" of Peak Bio's Value Proposition*

Rationale	Peak Bio
Experienced Management Team	✓
Visibility on Concurrent Financing	✓
Compelling Therapeutic Pipeline with Potentially Differentiated ADC Cancer Platform (Target(s), Payloads & Linker stability)**	✓
Substantiated Target Valuation	✓
Near-Term News Flow / Catalysts	✓
Access To Capital From Asia / USA	✓

* 100M+ USD raised to acquire and develop pH Pharma's assets including those that will merge with Ignyte/Peak Bio

Includes: Clinical stage PHP-303 (Bayer) and Preclinical ADC/Toxin platform

**Criscitello et al. J Hematol Oncol (2021) 14:20 <https://doi.org/10.1186/s13045-021-01035-z>; potentially meets all the criteria for an "ideal ADC" (1)

Antibody/Target, (TROP2) (2); Linker Stability; (3) Payload (Novel payload that is potent, potentially immunomodulatory, and has demonstrated in preclinical work lack of MDR transport (resistance) in Peak Bio's early preclinical work described in later slides.



Led By Serial Entrepreneur / Investor Hoyoung Huh, MD, PhD

Bringing **proven historical successes and business knowledge** acquired in key therapeutic areas

pH Pharma Founder & CEO Private	Pliant Therapeutics Chairman NASDAQ: PLRX	BridgeBio Co-Founder NASDAQ: BBIO	CytomX Therapeutics Former Chairman NASDAQ: CTMX	Geron Corporation Former Chairman NASDAQ:GERN
BiPar Sciences Former CEO Acq. by Sanofi for \$500M	Epizyme Former Chairman NASDAQ: EPZM	Facet Biotech Former Board Director Acq. by Abbott for \$760M	Nektar Therapeutics Former Board & COO NASDAQ: NKTR	McKinsey & Co Former Partner Healthcare / Technology
Cornell University Medical College, M.D. Cornell University/Memorial Sloan Kettering Cancer Center, Ph.D. (Cell Biology & Genetics) Dartmouth College, A.B. Biochemistry				

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Today's Presenters



HOYOUNG HUH
MD, PhD

Chief Executive Officer



STEPHEN LAMOND
PharmD, MBA

Chief Operating Officer



SATYAJIT MITRA
PhD

Head of Oncology



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Investment Highlights



Experienced Leadership with Proven Track Record

Led by serial entrepreneur and investor, Hoyoung Huh, M.D., Ph.D., who has had multiple successful exits for biotech companies through both acquisitions and public markets



Best-In-Class NE Inhibitor*

Underserved market opportunity potentially addressing previous therapeutic shortfalls with a highly selective and most potent reversible NE inhibitor with a favorable on target inhibition, PK /safety profile in multiple clinical studies (acquired from Bayer)



Multiple Shots-on-Goal with Near-Term Catalysts

Differentiated Inflammation and Oncology pipeline include a Phase II ready program targeting AATD (Orphan) and ARDS, a differentiated toxin and ADC platform, creating numerous novel clinical opportunities



Unique Platform Technology

Differentiated Antibody Drug Conjugate development platform providing an ability to birth multiple therapeutic candidates in large markets with high unmet needs



Financed by Quality Institutional Investors

Backed by high quality investors including SBI (SoftBank Investment), Palo Alto Investors and others with over \$100M raised to-date



Differentiated Access to Asian Markets and Large Pharma

Deep connections with Korea and Southeast Asia will enable future funding, partnerships and collaborations given entire pipeline is available (Pan-Pacific)

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* Neutrophil elastase inhibitors for the treatment of (cardio) pulmonary diseases: Into clinical testing with pre-adaptive Pharmacophores F. von Nussbaum, V. M.-J. Li / Bioorg. Med. Chem. Lett. 25 (2015) 4370-4381



Multiple Product Candidates and Milestones to Drive Future Value

Program	Opportunity	Discovery	Preclinical	Phase I	Phase II	Upcoming Milestones
PHP-303 5th Generation Neutrophil Elastase Inhibitor	AATD Alpha-1 Antitrypsin Deficiency					<ul style="list-style-type: none"> Phase II (EU) Initiation (2H 2022) Phase II (EU) Data (2H 2024) Phase IIb/III (EU/US) Initiation (2H 2024)*
	ARDS Acute Respiratory Distress Syndrome					<ul style="list-style-type: none"> IND submission (1H 2023) Phase 2 initiation (1H 2023) (Preclin & DoD Dependent)
TORPEDO™ Novel ADC Platform	ADC Targeting Trop2					<ul style="list-style-type: none"> IND submission (2H 2023) Phase Ia initiation (1H 2024)
	ADC Target Candidate Selection					<ul style="list-style-type: none"> Additional research collaborations
	Discovery work on Novel Toxins					<ul style="list-style-type: none"> Toxin PH5 and PH6 Go/No Go decisions

*Adaptive trial design still under consideration

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PHP-303 Targeting AATD & Other Diseases

Neutrophil Elastase Inhibitor Overview and Role of PHP-303



Overview of Neutrophil Elastase (NE)

- Neutrophil Elastase (NE) is a proteolytic enzyme that is required in the inflammatory response to tissue injury
- In the lungs, this leads to an increase mucus secretions and an inflammatory cascade response to tissue injury and disease



Neutrophil Elastase Inhibitors (NEIs)

- NEIs reduce the inflammatory process associated with a NE imbalance
- The reduction in the acute and chronic inflammatory process leads to a reduction in tissue destruction and limits exacerbation of associated diseases



History and Challenges of NEIs

- Earlier generations of NEIs have had limited success
- Augmentation and infusion therapies are costly and difficult to manage
- Several non-selective oral medications were introduced with limited potency and selectivity of the target
- The results in the early generations have demonstrated equivocal results



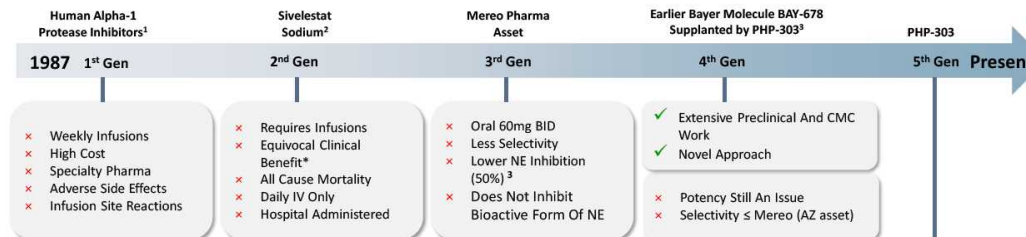
Our 5th Generation NE Inhibitor – Lead Clinical Asset

- Our lead asset PHP-303 is an Oral QD, reversible and highly selective small molecule addressing previous shortfalls
- PHP-303 is potentially an ideal solution for disease conditions where NE imbalance is an important contributor to disease

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PHP-303: 5th Generation Best-In-Class NE Inhibitor



PHP-303 – 5th Generation Phase II Ready NE Inhibitor Targeting AATD and ARDS

- ✓ Most potent NEI³: Chemistry improvement over 4th Gen with significant increase in potency
- ✓ Structural confirmation ‘freezes’ structure in an ideal bioactive conformation (e.g. “Lock and Key”)
- ✓ Selective, oral, once-daily, small molecule with significantly higher NE inhibition (~90% vs. ~50% in previous generations)³
- ✓ Inhibits bioactive form of Neutrophil Elastase with a sustained, dose-dependent suppression of NE activity
- ✓ Favorable safety achieved and dose established for upcoming clinical trials

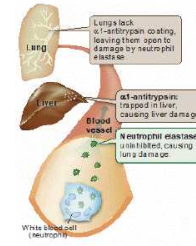
¹Prolastin®-Grifols, Zemaira®-CSL Behring, Aralast®-Baxter); ²Elaspol® Ono Pharma (Lilly) Japan, Korea only; ³PHP-303 (BAY 85-8501); ⁴Sivelestat only approved in Japan and Republic of Korea
³At 24 hr, only 1 dose from AZ trial (60 mg twice daily) revealed a relevant inhibitory capacity with approximately 50% inhibition. Higher doses did not translate into a higher target inhibition at 24, hr.; Neutrophil elastase inhibitors for the treatment of (cardio) pulmonary diseases: Into clinical testing with pre-adaptive Pharmacophores F. von Nussbaum, V. M.-J. Li / Bioorg. Med. Chem. Lett. 25 (2015) 4370–4381



Alpha-1 Antitrypsin Deficiency (AATD) Overview

What is Alpha-1 Antitrypsin Deficiency?

- AATD is a chronic, genetic orphan disease caused by mutations in gene encoding Alpha-1 Antitrypsin (AAT)
- AAT is a protein designed to protect tissue in the body from being attacked by its own enzymes
- AAT is produced in the liver and released in the bloodstream with a key role of inhibiting NE in the lung
- AAT trapped in the liver leads to uninhibited NE causing severe damages to the liver and lungs (Differential diagnosis suggests that Emphysema patients should be screened for AATD)



Current Treatment Options & Limitations

- Currently no cure for AATD
- Existing therapies attempt to reduce the inflammatory process, reduce exacerbations and the eventual tissue/organ destruction. (E.g., Augmentation/infusions and traditional Bronchodilators, steroids, etc.)
- Limitations of current therapies include: 1) low lung penetration, 2) cost 3) inconvenient weekly IV infusions, 4) procurement & 5) pathogen risk

Epidemiology & Market Opportunity

Disease Prevalence

~120K US / ~75K EU

Undiagnosed Patients

~90% of patients with genetic COPD due to Alpha-1

Adults Developing Lung Disease

~60-70%
(greatest risk based on genotype)

Growing Market

Estimated \$1.8 Billion market by 2025

16 Epidemiology & Market Opportunity Sources:
Alpha-1 Antitrypsin Deficiency (AATD) Market Insight, Epidemiology and Market Forecast - 2020, Delve Insight Market Insights 2020.
Turner-Oatley et al. Orphanet Journal of Rare Diseases (2018) 13:114 <https://doi.org/10.1186/s13023-018-0856-9>



PHP-303 Addresses the Unmet Medical Need in AATD

Demonstrated Safety and PK	<ul style="list-style-type: none">• Clinical efforts by Bayer and now pH Pharma have both demonstrated a well-behaved molecule• PHP-303 is well-tolerated with no severe or dose limiting toxicities or adverse events• Steady state (PK) between 11 and 18 days make for ideal oral, QD use in chronic condition
Relevance in AATD	<ul style="list-style-type: none">• NE likely important determinant in AATD disease progression (Chronic inflammatory imbalance)• PHP-303 inhibits bioactive form of enzyme
Proof of Concept Data	<ul style="list-style-type: none">• Dose-dependent NE inhibition demonstrated in clinical studies• Doses of 10-20 mg required for greatest inhibition• Phase II EU CTA protocol approved
Other Key Considerations	<ul style="list-style-type: none">• Supported by grant from Alpha 1 Project Advocacy group• Orphan disease with potential for additional exclusivity• Likely single pivotal Phase II / Phase III adaptive trial design• Growth: Major medical societies recommend screening ALL COPD patients for alpha-1*

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PHP-303 Phase II Readiness



Clinical Work

Completed clinical study data supports Phase II trial design

- Bayer previously completed four clinical studies with PHP-303 (SAD, MAD and Non-cystic Fibrosis Bronchiectasis)
- Renewed agreement with CRO
- Confirmed with Irish principal investigator continued interest in participating in the study



Subjects

235 subjects have received at least a single dose of PHP-303

- 123 subjects have received multiple doses of PHP-303 with an acceptable safety profile



Preclinical and CMC

Nonclinical data (from Bayer) sufficient to support clinical development of PHP-303

- Drug supply: placebo & drug product available for proposed clinical trial in UK and Ireland



Regulatory / Advisory

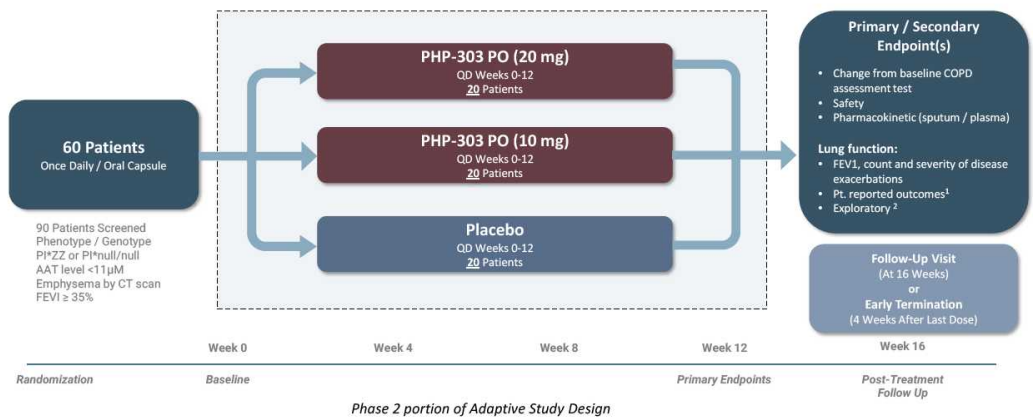
Scientific advice received from the Irish Health Protection Agency

- CTA approved in Ireland and to be submitted in UK (post-Brexit)
- Ethics review boards have approved protocols for treatment of ATDD in Ireland and UK (pre-Brexit)

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AATD Phase IIa Protocol and Development Pathway for PHP-303





19 Protocol approved by MHRA and HPRA, UK and Ireland Ethics Committees
¹PRO, EuroQol-5 Dimension
²P3 Registrational will need endpoints that include change in lung density



PHP-303 Comparison vs. Mereo

PHP-303s highly targeted and selective NE inhibitor showed significantly higher NE inhibition vs. Mereo (NASDAQ: MREO) at lower doses
 (Table adapted from F. von Nussbaum, V. M.-J. Li/Bioorg. Med. Chem. Lett. 25 (2015) 4370–4381)

	 Mereo BioPharma AstraZeneca	 PEAK BIO Bayer
Originator		
Clinical Stage	Four Phase II trials on-going (1 active; 3 recruiting)	Phase II ready
Potency Ki (nM)	X 12	✓ 0.08 (150X)
Mechanism of Action	X Does not interact directly with target	✓ Inhibits bioactive form of enzyme (novel)
Selectivity¹	X 79 ~ 2,000	✓ 375,000+
Max NE Inhibition (at 24hr dose)	X ~50% at 60mg BID and higher	✓ ~90% or more doses of 5mg, 10mg, and 20mg QD
Dosing Regimen	X Oral, BID 120mg (60mg BID)	✓ Oral, QD 10mg, 20mg

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¹ F. von Nussbaum, V. M.-J. Li/Bioorg. Med. Chem. Lett. 25 (2015) 4370–4381



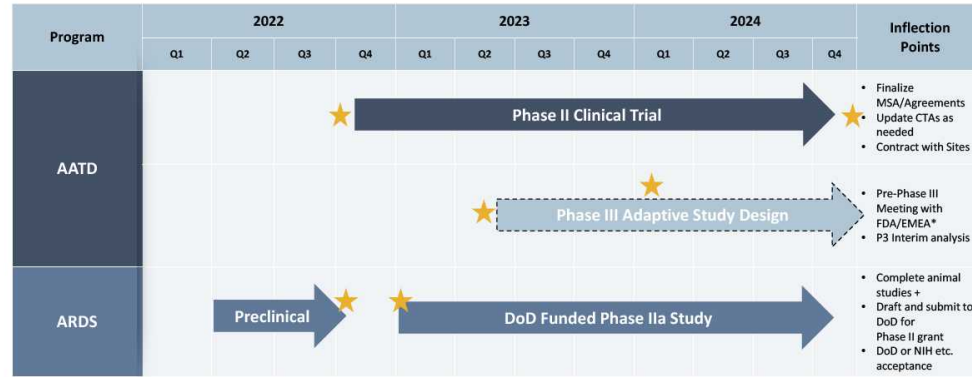
PHP-303 Additional Targeted Indications

Addressable Markets		Peak Bio Solutions	
<p>ARDS Market</p>	<ul style="list-style-type: none"> \$1B market opportunity expected by 2027 (Non-Covid)¹ ARDS Incidence: 800K (Non-Covid) High Mortality = 40%; 25 days in ICU & 47 days hospitalized 	<p>ARDS Solution</p>	<ul style="list-style-type: none"> QD, Oral dose improves compliance & quality of life Potential for DoD clinical grant covers Phase II (non-dilutive) If positive preclinical data received, Phase II likely to be initiated in late 2022
Future Opportunities			
<p>NASH Market</p>	<ul style="list-style-type: none"> NASH Incidence: 16M \$25B market opportunity expected by 2026² Limited success in existing NASH treatments and R&D Combination therapy needed for multiple targets 	<p>NASH Solution</p>	<ul style="list-style-type: none"> NE plays potential significant role with liver inflammation Safe, oral, QD therapeutic option Preclinical NASH animal work shows promising efficacy Partnership strategy with preclinical results
<p>Other Opportunities (CF, COPD with MZ GenoType)</p>	<ul style="list-style-type: none"> CF Incidence: 70K (IUS/EU)³ \$9.3B market opportunity expected by 2026³ COPD MZ Genotype: 250K patients in the US 	<p>CF, COPD MZ Genotype Solution</p>	<ul style="list-style-type: none"> Reduce inflammation cascade in lungs from NE/NET imbalances Reduced exacerbations Orphan designations Single Pivotal

21 ¹ Acute Respiratory Distress Syndrome (ARDS) Market Share, Size, Key Players, Trends, Competitive & Forecasts To 2027; ReportsandData; November 04, 2021
² <https://www.reportsanddata.com/report-detail/non-alkoholic-steatohepatitis-nash-market>
³ <https://www.alliedmarketresearch.com/cystic-fibrosis-therapeutics-market>



PHP-303 AATD and ARDS Development Pathway



*Adaptive Study design under consideration

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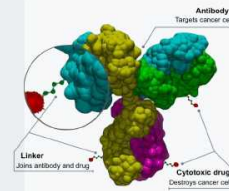


ADC Torpedo Platform

Antibody Drug Conjugate Overview

What Are ADCs?

- ADCs are a class of anti-cancer agents that combine selectivity of monoclonal antibodies with the cytotoxic potential of small-molecule chemotherapeutics
- ADCs work by targeting-
 - An **Antigen**: protein targets are present on cancer cell surface
 - With an **Antibody**: a large protein made by the immune system to seek out and destroy non-self antigens
 - Using a **Linker**: a chemical moiety that serves as a bridge and can be designed to immolate in the tumor cell / environment
- This combination results in delivering a **Payload / Toxin**: a small molecule with sub-nanomolar potency against target cells



Why Use ADCs?

- Chemotherapies and targeted small molecules delivered systemically must be dosed until the target at the tumor site is saturated
- Inability to focus treatment to the cancer target results in: a) exposure to higher doses and b) off-target toxicity to other organs
- ADCs reduce systemic exposure of payload by combining:
 - cancer-specific antigens
 - high target specificity, affinity, and favorable pharmacokinetics of mAbs
 - linkers responsive to tumor environment
- Therefore, ADCs focus therapeutic delivery to cancer over normal cells improving the therapeutic index

- There continues to be concerns of *off-target effects and toxicities* with current ADCs and their respective Payloads
- Peak Bio has a platform of *Differentiated Approaches* to expand the utility of ADCs

Attribute	Industry standard Tubulin/DNA targeted payloads	Peak Bio Solution E.g., PBI-253, Splicing Modulator
Bone marrow toxicity	Yes	No
Ocular toxicity/ peripheral neurotoxicity	Yes	No
Ability to generate neoepitopes	No	Yes

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What Makes Peak Bio's Unique Approach to ADCs Better?

Traditional ADC Approach

Antibody + Linker + Chemotherapeutic / Toxin (Targeted CytoToxicity)

- Over 90% of current ADC payloads target tubulin or DNA (Processes essential to dividing cancer cells or their DNA*)
- There is emerging resistance to these payloads
- Industry standard payloads are STILL associated with significant toxicities E.g., Ocular, bone marrow, peripheral neuropathy
- Substrates of MDR (ABC) Transporters (Emerging drug resistance mechanisms)

What Makes our Solution Better?

Peak Bio approach engages the immune system:

- Enhances tumoricidal activity beyond cytotoxicity creating a potential *Best-in-Class* approach to treating Cancer
- Engaging the Host Response (T and B cells) can co-evolve and can counter resistance mutations
- Payloads that act as poor substrate for MDR Transporters
- Immune memory and can re-engage when treated cancers reoccur

Our Novel, Potentially Differentiated Immuno-stimulatory Payload Approach

Antibody + Linker + Peak Bio Toxin w/ Immune Modulation = Better 'Mouse Trap'

Spliceosome Modulation (PH1)

- Targeting proper splicing of introns results in mRNA decay depriving cancer cells of essential proteins and mis-spliced proteins
- Creates neoepitopes for immune cells to target well after the initial "chemotherapy" is delivered

DNA Mismatch Repair (MMR) Interference (PH5)

- Prevent cancer cells from repairing mistakes during active DNA replication, thereby fixing the errors in translated proteins (neoepitopes)

Immune Suppression (PH6)

- Killing tumor cells and pro-tumor immune cells that have been coopted

26 *Topoisomerase and microtubule inhibitor payloads inhibit DNA replication and cancer cell division and PBD payloads cross-link DNA



Our Approach: Generation of Novel Toxins

We Use the Following Orthogonal Mechanisms of Immune Modulation in ADCs Using Novel Toxins

Spliceosome Modulation (PH1)

Cancers carry mutations in splicing factors that function similarly to oncogenic driver mutations by affecting similar biochemical pathways

Prevent DNA mismatch repair (PH5)

As cancer cells divide rapidly, they tend to accumulate mutations and single-strand breaks that are repaired by DNA mismatch repair (MMR) enzymes

Immune Suppression (PH6)

Cold tumors secrete factors that suppress the immune system and coopt immune cells. These immune cells are pro-tumor and help the cancer cells thrive

When targeted to cancer cells each ADC:

PH1 Targeting

- Disrupts alternative splicing
- Deprives cancer cells of essential survival and growth factors
- Causes accumulation of mis-spliced proteins inducing tumor cell death
- Accumulates neoantigens recognized by immune cells as foreign proteins
- Synergizes with checkpoint inhibitors that alleviate suppression of immune cells

PH5 Targeting

- Inhibits DNA MMR enzymes
- Disrupts the cancer cell's ability to repair mutations
- Prevents cell division
- Induces expression of neoantigens
- Stimulates the immune system
- Synergizes with checkpoint inhibitors

PH6 Targeting

- Induces cancer cell death by activating caspases
- Induce immune suppression of coopted immune cells
- Inhibits tumor recruitment of blood vessels (angiogenesis)

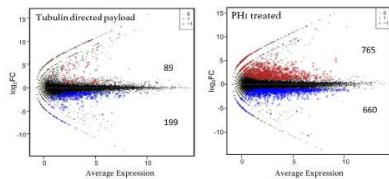
27



PH1: Potentially Best-in-Class Payload

Changed & Increased Neopeptides*

* Average expression of spliced RNA transcripts treated by PH1 vs tubulin payload DM1 (Kadcyla)



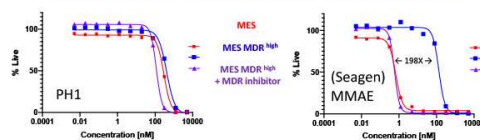
- Each mark / dot represents an alternatively spliced gene transcript
- Blue marks in PH1 reflects 3-fold greater impact on global splicing
- Red marks in PH1 reflect 9-fold increased numbers of mis-spliced RNAs potentially contributing to neopeptides

*Source(s): Data on file, Internal Peak Bio Research Program reports

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Reduced Drug Resistance via MDR*

As PH1 is not recognized by Multi-Drug Resistance (MDR) transporters, the same concentration of PH1 is required to kill MES cells in conditions below



Other ADC payloads such as MMAE (Seagen) can be 'pumped out' by MDR transporters resulting in 200X higher concentrations required to kill MES overexpressing MDRs

Red – MES cells

Blue – Resistant MES cells expressing high levels of MDRs

- Resistance gained by increasing the number of cell surface transporters pumping payload out of the cell.

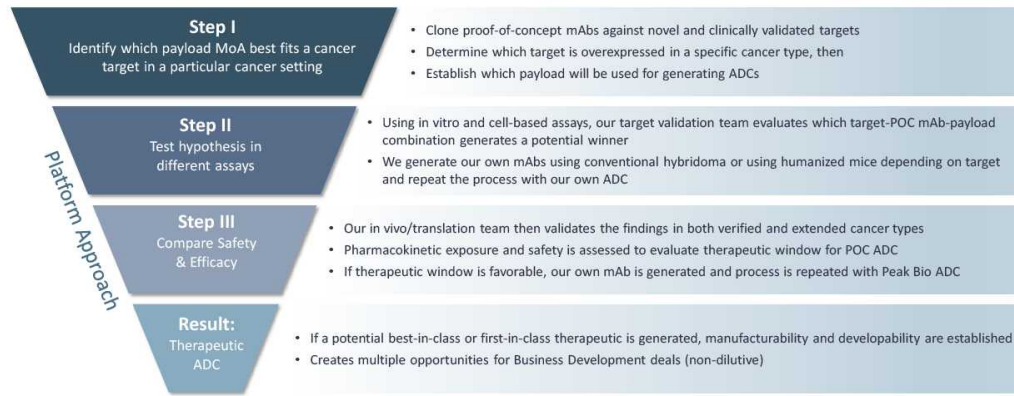
Purple – MES with high MDR expression plus MDR inhibitor Elacridar

- Inhibits MDR transporter activity so cannot pump payload out even though highly expressed. Returns activity back to baseline.



Combining Novel Toxins with Novel Targets Leads to Novel ADCs

Platform allows for multiple shots on goal and BD partnerships



**NOTE: In addition to our portfolio of Toxins and ADC(s) Peak Bio de-risks their portfolio with early discovery work with Bi-Specific Antibodies, PROTAC (Proteolysis-Targeting Chimera)*

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Potentially Best-in-Class ADC Candidate Targeting Trop2

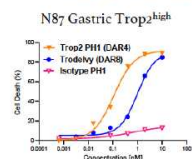
Clinically Validated Target (Trop2)

- Superior linker stability compared to an FDA approved competitor
- Superior specificity to cancer cells and unique ability to generate neoepitopes and synergizes with I/O therapies
- Tumor recruitment of T-helper cells
- Anti-tumor immune memory upon experiments
- Wide safety margin in non-human primate tox study
- IND-lead candidate chosen & 18-24 months to FIH

*Source(s): Data on file, Internal Peak Bio Research Program reports

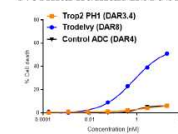
30

Trop2 PH1 ADC-Potent In-vitro Activity*

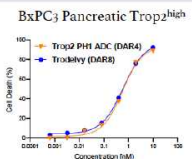


In gastric cancer, superior cytotoxicity at DAR than first-in-class (FIC)

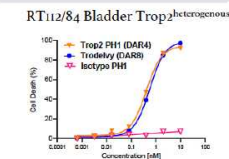
Normal human fibroblasts



No cytotoxicity against normal human fibroblasts as observed in FIC (Attributed to superior linker stability)



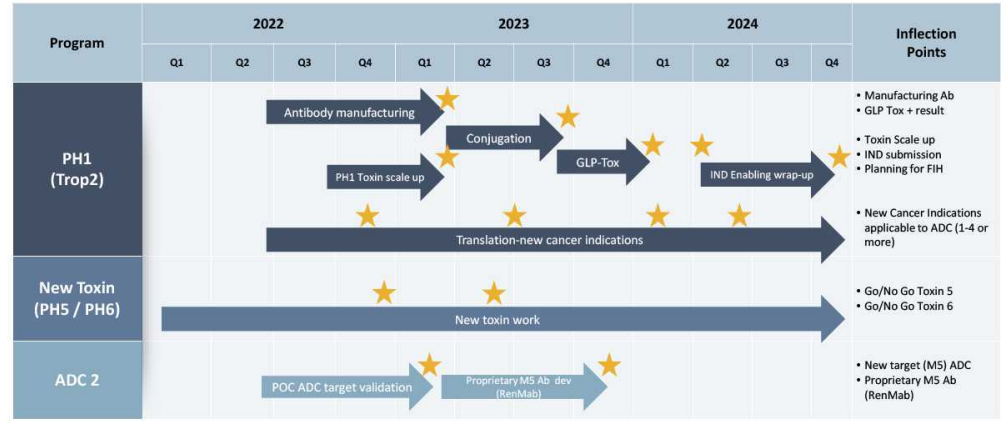
In pancreatic cancer cells, comparable cytotoxicity at lower DAR than FIC



In bladder cancer, comparable cytotoxicity at lower DAR than FIC



ADC Torpedo Clinical Development Pathway



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Corporate Summary

Peak Bio Milestones & Value Driving Catalysts

	2022	2023	2024	2025
PHP-303 (AATD)	<ul style="list-style-type: none"> Phase II Initiation (2H) Finalize MSA/Agreements Update CTAs as Needed Contract with Sites 	<ul style="list-style-type: none"> Pre-Phase III Meeting with FDA/EMA (1H) Phase III Adaptive Design Study (1H) Interim Analysis Data (2H) 	<ul style="list-style-type: none"> Phase II (EU) Data (2H) End of Phase II Reg Meetings (1H) Phase IIb/III (EU/US) Initiation (2H) 	<ul style="list-style-type: none"> Phase III Continues
PHP-303 (ARDS)	<ul style="list-style-type: none"> Complete Preclinical Studies (1H) Draft and Submit to DoD for Phase II Grant (2H) 	<ul style="list-style-type: none"> IND Submission (1H) DoD Funded Phase IIa Study (1H) 		<ul style="list-style-type: none"> Phase III (EU/US) Data Read Out
ADC 1 (Trop2)	<ul style="list-style-type: none"> Begin Antibody Manufacturing (2H) PH1 Toxin Scale Up (2H) Translation: Cancer Indication (2H) 	<ul style="list-style-type: none"> Finish Ab manufacturing (1H) PH1 toxin scale up completed (1H) Translation Cancer Indication (1H) Begin Conjugation (2H) 	<ul style="list-style-type: none"> IND Enabling Trop2 (2H) Planning for FIH Translation Cancer Indications(2) (1H, 2H) 	<ul style="list-style-type: none"> IND Submitted (1H)
ADC 2	<ul style="list-style-type: none"> Identify / Verify New Target MSPH1 (2H) 	<ul style="list-style-type: none"> Proprietary Ab Dev. (RenMab) (2H) 	<ul style="list-style-type: none"> New Target Identification (2H) 	
Oncology New Toxin (PH5 / PH6)	<ul style="list-style-type: none"> Go/No Go Toxin 5 (2H) Toxin Work 	<ul style="list-style-type: none"> Go/No Go Toxin 6 (2H) Toxin Work 	<ul style="list-style-type: none"> Toxin Work 	

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Multiple Product Candidates and Milestones to Drive Future Value

Program	Opportunity	Discovery	Preclinical	Phase I	Phase II	Upcoming Milestones
PHP-303 5th Generation Neutrophil Elastase Inhibitor	AATD Alpha-1 Antitrypsin Deficiency					<ul style="list-style-type: none"> Phase II (EU) Initiation (2H 2022) Phase II (EU) Data (2H 2024) Phase IIb/III (EU/US) Initiation (2H 2024)*
	ARDS Acute Respiratory Distress Syndrome					<ul style="list-style-type: none"> IND submission (1H 2023) Phase 2 initiation (1H 2023) (Preclin & DoD Dependent)
TORPEDO™ Novel ADC Platform	ADC Targeting Trop2					<ul style="list-style-type: none"> IND submission (2H 2023) Phase Ia initiation (1H 2024)
	ADC Target Candidate Selection					<ul style="list-style-type: none"> Additional research collaborations
	Discovery work on Novel Toxins					<ul style="list-style-type: none"> Toxin PH5 and PH6 Go/No Go decisions

*Adaptive Study design under consideration

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Intellectual Property Portfolio

PHP-303 Patent Family Acquired from Bayer

- Patents owned by Peak Bio have coverage through 2029
- Composition of matter has some previous use claims that will expire in 2028
- Issued (key jurisdictions)
 - AU, CA, CH, GER, SP, FR, UK, KOR, JP

PHP-303 *Patent Families Owned by PHP (Use Claims)*

- Use of an NEI in Lung Disease AATD; Provisional filed on August 23, 2019
 - PCT and Taiwan patent pending – filed on August 21, 2020
- Use of an NEI in Liver Disease NASH
- US Patent expiration on April 22, 2039
- Patent pending in AU, CH, CA, EU, ISR, IND, JP, KOR, NZ, SNGP, and TWN

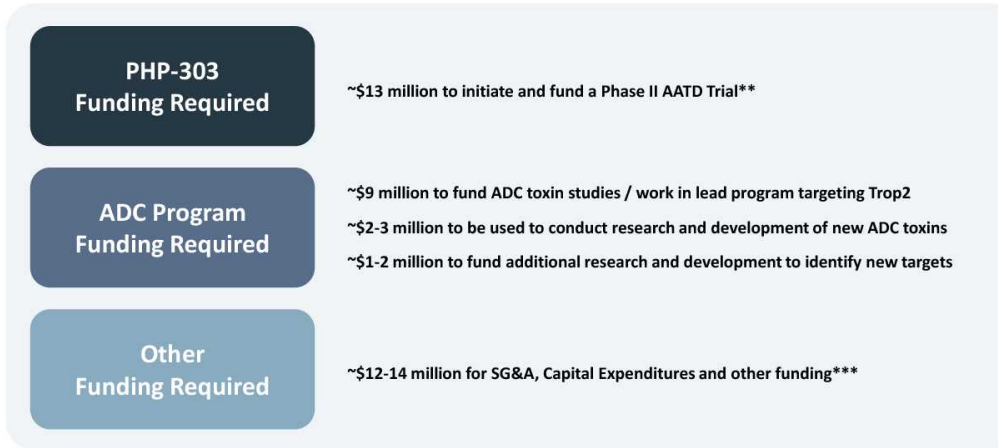
THAILANSTATIN ANALOGS *Novel Toxin(s)*

- Novel Toxin composition of matter - direct US application filed on September 19, 2018, that will be covered through 2028
- US ADC composition of matter, pharmaceutical composition & use in cancer therapy
 - Directly filed US application that will expire in 2038
- Further US claims for Toxin + Linkers of composition of matter
- Pending international applications based on PCT/US2018/051721
- Priority date filed on September 19, 2017, and will be expected to expire in 2038
 - Applications pending in AU, BR, CA, CN, EP, HK, IL, IN, JP, KR, MX, NZ, RU, SG, US, TWN, ZA
 - Patent extensions beyond are to be determined

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Cash at Closing Expected to Provide Runway Through 2024*



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*All figures are estimates. Actual amounts may vary
**Adaptive Design study being contemplated-budgets, timing, PIPE Raise
***Assumption for D/O Insurance built in but doesn't include Banker fees



Investment Highlights



Experienced Leadership with Proven Track Record

Led by serial entrepreneur and investor, Hoyoung Huh, M.D., Ph.D., who has had multiple successful exits for biotech companies through both acquisitions and public markets



Best-In-Class NE Inhibitor*

Underserved market opportunity potentially addressing previous therapeutic shortfalls with a highly selective and most potent reversible NE inhibitor with a favorable on target inhibition, PK /safety profile in multiple clinical studies (acquired from Bayer)



Multiple Shots-on-Goal with Near-Term Catalysts

Differentiated Inflammation and Oncology pipeline include a Phase II ready program targeting AATD (Orphan) and ARDS, a differentiated toxin and ADC platform, creating numerous novel clinical opportunities



Unique Platform Technology

Differentiated Antibody Drug Conjugate development platform providing an ability to birth multiple therapeutic candidates in large markets with high unmet needs



Financed by Quality Institutional Investors

Backed by high quality investors including SBI (SoftBank Investment), Palo Alto Investors and others with over \$100M raised to-date



Differentiated Access to Asian Markets and Large Pharma

Deep connections with Korea and Southeast Asia will enable future funding, partnerships and collaborations given entire pipeline is available (Pan-Pacific)

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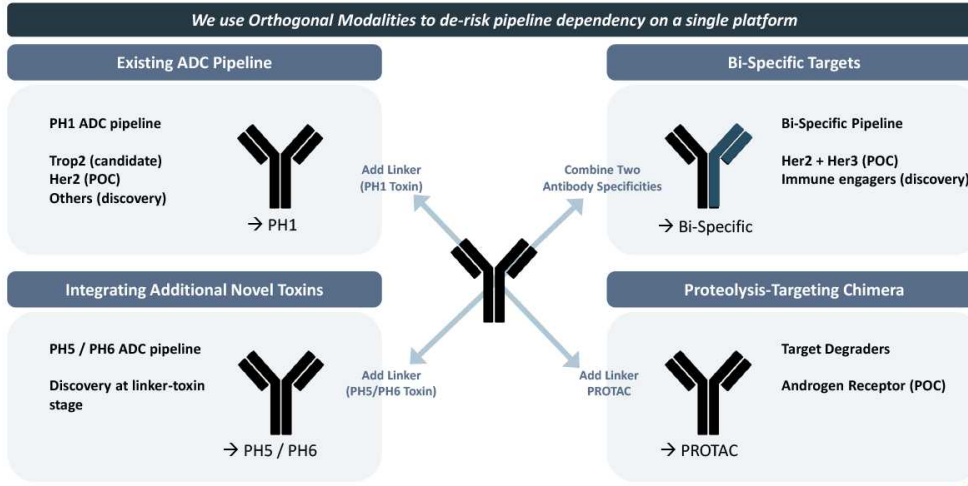
*Neutrophil elastase inhibitors for the treatment of (cardio) pulmonary diseases: Into clinical testing with pre-adaptive Pharmacophores F. von Nussbaum, V. M.-J. Li / Bioorg. Med. Chem. Lett. 25 (2015) 4370-4381





Appendices

Other Programs for Future Development



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Evaluation of Trop2 PH1 Potency in Multiple Cancer Types*

Trop2 PH1 Antibody Drug Conjugate Shows Nanomolar Potency In Various Indications

Screening Panel

Cancer type	Number
Bladder	4
Breast	10
Esophageal	5
Head & Neck	7
Lung (LuAD/ Lu Sq)	15
Lung (NSCLC)	8
Ovarian	5
Pancreatic	5
Gastric	8
Uterine	8
CRC	3
Skin (Epidermoid)	1
Brain (GBM)	1
Total	70

40

Early results

Cell No.	Cell lines	Absolute IC50		% inhibition at top conc.	
		Trop2 PH1 (nM)	Cisplatin (µM)	Trop2 PH1 (nM)	Cisplatin (µM)
1	Pancreatic1	1.21	15.35	88.52%	93.41%
2	Pancreatic2	1.50	0.39	88.62%	99.98%
3	Pancreatic3	7.52	0.70	82.82%	99.94%
4	Gastric 1	1.32	2.36	85.07%	97.52%
5	Gastric 2	4.03	10.03	88.93%	92.97%
6	Bladder 1	1.77	4.12	95.19%	99.97%
7	Bladder 2	1.97	1.29	93.54%	99.99%
8	Lung 1	1.63	3.08	90.31%	99.96%
9	Lung 2	1.88	9.00	74.29%	95.28%
10	Lung 3	3.69	4.15	63.30%	91.17%
11	Lung 4	4.65	2.36	81.52%	99.71%
12	Uterine 1	9.68	0.93	74.10%	99.96%
13	Breast 1	7.77	7.03	83.38%	99.67%
14	Breast 2	12.30	1.52	77.55%	99.53%

*Source(s): Data on file, Internal Peak Bio Research Program reports

