



PRESS RELEASE

DEBIOPHARM AND UBIX THERAPEUTICS LAUNCH RESEARCH TO DEVELOP A NEW ANTI-CANCER MODALITY - ANTIBODY DEGRADUCER® CONJUGATES

Lausanne, Switzerland, Seoul, Republic of Korea – June 16th, 2021 – Debiopharm (www.debiopharm.com), a Swiss-based global biopharmaceutical company and Ubix Therapeutics (en.ubixtrx.com), a South Korea-based biotech company today announced their co-research agreement combining two novel proprietary technologies to specifically target cancer cells. The two companies are aiming to develop a new drug modality known as Antibody Degraducer[®] Conjugates (ADeC), by combining one of Ubix's Degraducer[®] molecule, with Debiopharm's antibody drug conjugate linker Multilink™. Degraducer[®] linked to therapeutic antibodies via Multilink™ will improve drug targeting and could have a synergistic effect on tumor cells, thereby resulting in improved efficacy and safety of cancer therapies.

Cancer treatment has been revolutionized by antibody drug conjugates (ADCs) as they've offered patients therapy that targets mainly cancer cells while avoiding the systemic release of cancer-killing toxic payloads, like systemic chemotherapy, throughout the body. Linkers play a critical role in the function of ADCs as they help to attach the cytotoxic payload to the antibody, stabilize the molecule during circulation, and release the toxic payload specifically into the target tissue¹. Multilink™ is a new cleavable linker platform that allows the loading of multiple drug payloads on an antibody. Degraducer® is a powerful, bifunctional, inhibitor technology that enables selective protein degradation and prolonged therapeutic effects. Combining these advanced biotechnology solutions offers the unique opportunity to produce new types of antibody conjugates with dual molecular targeting (via the antibody and the Degraducer®). These antibody Degraducer® conjugates could extend the range of therapeutic antibody conjugates available for the treatment of various cancers.

"We hope this plan to achieve a pre-clinical, proof-of-concept for antibody Degraducer® conjugates will boost the efficacy, precision and safety of antibody-based therapies and lead to clinically meaningful solutions while providing improved life quality for cancer patients," expressed **Cedric Sager, CEO of Debiopharm Research & Manufacturing,** "We are thrilled to collaborate with Ubix Therapeutics to understand more about the potential synergies of combining their Degraducer® technology with our Multilink™ platform."

"We are excited to explore Antibody Degraducer Conjugates (ADeC) with Debiopharm. In particular, we are pleased to take the opportunity to combine our Degraducer® technology, having superior efficacy and high selectivity, with Debiopharm's Multilink™ technology, having lots of advantages especially excellent potency through multiple loading capability. We believe that this collaboration will open up new opportunities to develop advanced cancer therapy." said BK Seo, CEO of Ubix Therapeutics.

About Multilink™

Multilink™ is a new cleavable linker platform suited for multidrug attachment and compatible with any conjugation technology to produce ADCs with high DAR (drug-to-antibody ratio). This unique and innovative technology allows the loading of multiple payloads on an antibody for an enhanced therapeutic effect. This highly effective and well-tolerated linker platform is available for use of

other specialty biotech or pharmaceutical companies to generate a proprietary, clinical-stage ADCs.

About Degraducer®

Degraducer® is a technology that utilizes the ubiquitin-proteasome system (UPS), an intracellular degradation system. Degraducer® is a bifunctional molecule where a "ligand", which binds to target protein, and a "binder", which binds to E3 ubiquitin ligase. In other words, Degraducer® is a powerful inhibitor technology that enables target protein degradation and consequent therapeutic effects by placing a disease-related target protein nearby E3 ligase, which can then initiate the protein degradation system.

Debiopharm's commitment to patients

Debiopharm develops & manufactures innovative therapies and drug delivery technologies that target high unmet medical needs in oncology and infectious diseases. Bridging the gap between disruptive discovery products and real-world patient reach, we identify high-potential compounds and technologies for in-licensing, clinically demonstrate their safety and efficacy and then select large pharmaceutical commercialization partners to maximize patient access globally.

For more information, please visit www.debiopharm.com

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 Zheng Su, et al. Acta Pharmaceutica Sinica B, 2021, ISSN 2211-3835, (https://doi.org/10.1016/ j.apsb.2021.03.042.) 바이오 벤처기업 유빅스테라퓨틱스는 스위스에 본사를 둔 글로벌 바이오제약 기업인 디바이오팜 (Debiopharm)과 표적 항암 치료제 개발을 위한 공동 연구 계약 체결을 발표했다. 양사는 유빅스테라퓨틱스가 보유한 표적 단백질 분해 기술인 Degraducer® 와 디바이오팜이 보유한 항체-약물 결합 링커 기술인 Multilink™를 결합하여 새로운 약물 플랫폼 기술인 항체-분해약물 접합체 (Antibody-Degraducer Conjugates, ADeC)를 개발한다는 계획이다. ADeC 기술은 향상된 암세포 표적화 능력과 표적 단백질 분해 능력을 바탕으로 기존 항암제에 비해 우수한 효능과 안전성을 가질 것으로 기대된다.

항암제 분야에서 널리 사용되고 있는 항체-약물 접합체 (antibody-drug conjugate, ADC) 기술은 암세포를 죽이는 독성 약물의 전신적인 방출을 피하면서 암세포를 표적화하여 약물을 전달하는 기술로, 항암제 분야의 혁신을 가져왔다. ADC 기술의 구성요소인 링커 (linker)는 세포독성 약물을 항체에 부착하고, 체내를 순환하는 동안 분자를 안정시키며, 약물을 표적 조직으로 방출하도록 돕는 등 ADC의 기능에서 중요한 역할을 한다.

Multilink™는 디바이오팜의 독자적인 링커 기술로, 항체에 다량의 약물을 부착할 수 있는 새로운 분리형 링커 플랫폼이다. 유빅스테라퓨틱스의 Degraducer®는 표적 단백질 분해를 통해 장기적인 치료 효과를 가능하게 하는 강력한 이중 기능 유기 저분자 (bifunctional small molecule)이다. 그리고 이러한 양사의 기술을 결합한 ADeC는 이중 표적을 공략함과 동시에 암세포의 표적 단백질 제거를 통한 장기적 치료 효과를 가지게 되며, 다양한 항암제 개발에 적용할 수 있는 새로운 기반 기술이 될 것으로 기대된다.

세드릭 세이거 (Cedric Sager) 디바이오팜 연구/생산 부문 CEO는 "ADeC에 대한 비임상 검증 및 개발을 통해 항체 기반 치료제의 효능과 정밀도, 안전성을 향상시키고, 임상에서도 암 환자에게 유의미한 해결책을 제시함으로써 삶의 질 향상으로 이어지길 기대한다"고 말했다. 또한, "유빅스테라퓨틱스와의 협력으로 Degraducer® 기술과 당사의 Multilink™ 플랫폼 간의 시너지 효과를 크게 기대하고 있다."고 밝혔다.

유빅스테라퓨틱스 서보광 대표는 "글로벌 바이오제약 기업인 디바이오팜과 협력하여 ADeC라는 새로운 기술 개발을 하게 되어 매우 기쁘다. 이번 공동연구를 통해 한층 더 진보된 항암제 기반 기술을 개발할 것이며, Degraducer®기술의 적용 범위를 더욱 넓힐 수 있는 좋은 기회라고 생각한다."고 소감을 밝혔다.