세미나 초록

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발표 내용	Targeted protein degradation (TPD) is a novel platform technology, enabling a pathological target protein to be degraded by activating the protein degradation system. TPD technology has several advantages over current therapeutics. TPD-based drugs can interact with and eliminate the target proteins instead of modulating their activities. The most important feature of TPD technology is that every protein, including the undruggable proteins, can be targeted. Despite its huge potential, current TPD technology has several limitations. Due to the large molecular weight of TPD-based drugs, this technology is hindered by low bioavailability and low blood-brain barrier penetration. Additionally, current TPD technology is limited by the number of E3 ubiquitin ligases, which induce ubiquitination of the target protein. Tissue expression profiles of E3 ubiquitin ligases and possible mutations in genes encoding the E3 ubiquitin ligases are also obstacles for the successful development of TPD therapeutics. In this symposium, we will introduce a novel TPD technology to overcome these limitations. Our SPiDEM™ technology is based on a completely different mode of action, enabling us to develop SPiDEM™-based drug candidates with superior pharmacokinetics and efficacy.