

doubts about the potential of the proposed product, thereby inhibiting further interest. This contrasts with industry-based R & D, which often emphasizes manufacturing, regulatory and commercial factors. Academics do not so much choose to ignore those necessary and standard elements of translation development, but rather, they are not built into the culture or incentive structure of the university environment. Acknowledging and addressing this mismatch of approach and lack of common language in a systematic way facilitates a more effective “translation” handoffs of academic project concepts into meaningful clinical solutions help translational researchers more efficiently develop and progress new and better medical products which address validated needs. The authors provide an overview and framework for academic researchers to use which will help them define the elements of a market-driven translational program (1) problem identification and validation; (2) defining the conceptual model of disease; and (3) risk evaluation and mitigation strategies.

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It is challenging to develop innovative, as well as commercially viable, lipid-based drug delivery systems for the treatment of cancer because of the breadth of existing intellectual property that limits freedom-to-operate. For example, novel compositions can be described in which an NCE is associated with a lipid based carrier, but if the loading method or components of the lipid compositions are proprietary then the ability to develop novel compositions will require access to the appropriate intellectual property. We believe it is useful to present a review of the patent literature describing novel liposomal drug delivery systems given by parenteral administration to humans for the treatment of serious medical conditions such as cancer. This review is intended to: (i) identify and describe novel approaches that have recently been protected by US or international patents and patent applications; and (ii) identify founding technology in the field which is recently off-patent, thus presenting emerging opportunities for the development of new therapeutic options for patients. Issued patents, and selected patent applications, having publication dates in 2005 or 2006 were retrieved from searches of the US, European, German, Japanese, INPADOC and WIPO PCT databases. Liposomal delivery systems patented for systemic administration in the treatment of human medical conditions were reviewed in detail.