The hematological cancers pipeline, which covers leukemia, lymphoma and myeloma, is the largest within the oncology therapy area of pharmaceuticals, with 1,474 programs in active development and a total of 477 first-in-class pipeline programs, according to business intelligence provider GBI Research.

The company's latest report states that cytokine signaling targets make up the greatest proportion of pipeline and first-in-class programs, followed in both instances by kinases. These two target categories are intrinsically linked with components of immune response, and are responsible for the majority of targets, in part due to the nature of hematological cancers and their action on immune cells. Additionally, much of the promising potential within the hematological cancers area revolves around targeted immunotherapies.

Callum Dew, Associate Analyst for GBI Research, explains: "As these disorders affect the immune cells within the blood and bone marrow, there is a high degree of pathophysiological crossover between the separate types of malignancy within hematological cancers, so it is not uncommon for products being developed for this therapy area to be tested across multiple indications. 214 first-in-class programs are being developed for a single indication, but 229 are in development for two or more hematological cancer indications, highlighting the versatility of current pipeline programs."

With regard to individual molecular targets in the pipeline, 27.3% are first-in-class, which is a greater proportion than the industry average.