

OBITUARY



Obituary—Pieter Van Vlierberghe (1980–2022)

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On 30 December 2022 Professor Pieter Van Vlierberghe passed away at the age of only 42 years. With his much too early death, the scientific community not only lost an outstanding researcher and internationally leading expert in the molecular biology of acute lymphoblastic leukemia (ALL), but also an enthusiastic teacher and impressive personality.

Pieter Van Vlierberghe made his first steps in cancer research in the group of Jules Meijerink and Rob Pieters at Erasmus Medical Center, Rotterdam where he obtained his PhD in 2008. Research findings obtained during his PhD and research as postdoc with Frank Speleman (Belgium) and Adolfo Ferrando (New York) resulted in a breakthrough study showing loss-of-function mutations of *PHF6*—a driver gene in T-ALL [1]. Among many other important manuscripts, he published findings which highlighted the role of *ETV6* mutations in early immature human T-cell leukemias [2]. Besides his specific interest in the biology of leukemias he particularly focused on mouse models and translational research, leading to an impressive oeuvre of papers published in high ranked journals like *Nature Genetics*, *Nature Communications*, *Journal of Experimental Medicine*, *Leukemia*, *Blood* and *Haematologica* (Fig. 1).

After completing his postdoc, Pieter obtained the prestigious ERC starting grant in 2015 which allowed him to launch a research group at the Ghent University in Belgium. Besides studies focusing on T-ALL, he became involved in preclinical evaluation of novel therapeutics for human leukemia. In this field he reported recurrent translocations targeting the *ZEB2* transcription factor gene, a potential therapy target in immature/early T-cell precursor-ALL [3]. Using a Zeb2-driven mouse model he demonstrated that this oncogene initiates T-cell leukemia. Pieter unfortunately had to leave several exciting research projects unfinished, which includes the delineation of the role of oncogenic transcription factors, such as MYB, and epigenetic marks, such as DNA methylation, in hematologic malignancies, as well as the evaluation of promising novel forms of therapeutics, such as asparaginase, against aggressive forms of leukemia.

For multiple scientific merits he received important awards including the Swiss Bridge Award in 2016, the Fund Baillet Latour scholarship in 2018 and the prestigious “KVAB” award for leukemia research in 2020.

His interests in epigenetics of malignant haematopoiesis brought us together to collaborate in the EU funded H2020 Twinning project “On the road to excellence in unraveling the



Fig. 1 Professor Pieter Van Vlierberghe. From a day trip to the Netherlands in 2021 (the photo was kindly provided by Wouter Van Loocke).

(epi)genetic landscape of hematologic Neoplasms”—Next_Level. He was an engaged, passionate and enthusiastic collaborator (www.nextlevel-h2020.eu; 952304).

Beside his scientific merits, Pieter was also a good friend to us. Through his openness, kindness and supportive nature, he contributed not only to the scientific but also the personal growth of his students and colleagues. The way he coped, lived and taught with his severe disease, made us reflect on the value, the power and the fragility of life.

It was an honor and a great privilege to work with him. We sympathize with his family and wish them a lot of strength.

REFERENCES

1. Van Vlierberghe P, Palomero T, Khiabani H, Van der Meulen J, Castillo M, Van Roy N, et al. PHF6 mutations in T-cell acute lymphoblastic leukemia. *Nat Genet.* 2010;42:338–42.
2. Van Vlierberghe P, Ambesi-Impiombato A, Perez-Garcia A, Haydu JE, Rigo I, Hadler M, et al. ETV6 mutations in early immature human T cell leukemias. *J Exp Med.* 2011;208:2571–9.
3. Goossens S, Radaelli E, Blanchet O, Durinck K, Van der Meulen J, Peirs S, et al. ZEB2 drives immature T-cell lymphoblastic leukaemia development via enhanced tumour-initiating potential and IL-7 receptor signalling. *Nat Commun.* 2015;6:5794.

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COMPETING INTERESTS

The authors declare no competing interests.