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EDITORIAL

PULMONARY VASCULAR DISEASE

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 Pulmonary complications of tyrosine kinase inhibitors in myeloproliferative disorders M.J. RICHTER ET AL. PULMONARY VASCULAR DISEASE Tyrosine kinase inhibitors in myeloproliferative disorders
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Life has changed for patients with chronic myeloid leukaemia (CML) since the introduction of breakpoint cluster region–Abelson (Bcr–Abl) tyrosine kinase inhibitors (TKIs) in the late 1990s. Before the era of the TKIs began, the 5-year overall survival rates for patients with CML were approximately 28–66%, depending on risk group, chemotherapy regimen and interferon use [1]. In 1996, the first oral TKI was investigated in pre-clinical studies and showed an astonishing reduction of tumour cell formation [2]. This TKI, later named imatinib, was the first to gain US and EU approval for CML in 2001 [3–5] and dramatically increased long-term survival rates to 76–94% at 6 years, depending on risk group [6]. Since then, various generations of Bcr–Abl TKIs have been developed, which induce even higher and faster rates of complete cytogenetic response than first-generation TKIs. To date, Bcr–Abl TKIs provide the basis for successful treatment of the underlying myeloproliferative disease [7].