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Units

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Publications (23)

Zhou X, Besse A, Peter J, Steinhardt M, Vogt C, Nerreter S, Teufel E, Stanojkovska E, Xiao X, Hornburger H, Haertle L, Mendez Lopez M, Munawar U, Riedel A, Han S, Maurits E, Overkleeft H, Florea B, Einsele H, Kortüm K, Driessen C, Besse L, Rasche L. High-dose carfilzomib achieves superior anti-tumor activity over low-dose and recaptures response in relapsed/refractory multiple myeloma resistant to lowdose carfilzomib by co-inhibiting the β 2 and β 1 subunits of the proteasome complex. *Haematologica* 2023; 108:1628–1639.

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Mendez-Lopez M, Besse A, Florea B, Zuppinger C, Overkleeft H, Besse L, Driessen C (2021). Carfilzomib-induced acute cardiotoxicity is mediated through angiotensin and caused by cardiomyocyte energy depletion.

Besse L, Bolomsky A, Ludwig H, Hannich J, Loguinov A, Everts B, Berkers C, Pilon M, Farhan H, Vulpe C, Overkleeft H, Huber J, Ståhlman M, Borén J, Besse A, Stolze S, Sobh A, Zaal E, van der Ham A, Ruiz M, Phuyal S, Büchler L, Sathianathan M, Florea B, Driessen C. Treatment with HIV-Protease Inhibitor Nelfinavir Identifies Membrane Lipid Composition and Fluidity as a Therapeutic Target in Advanced Multiple Myeloma. *Cancer Res* 2021; 81:4581–4593.

Byrgazov K, Besse A, Kraus M, Slipicevic A, Lehmann F, Driessen C, Besse L. Novel Peptide-drug Conjugate Melflufen Efficiently Eradicates Bortezomib-resistant Multiple Myeloma Cells Including Tumor-initiating Myeloma Progenitor Cells. *Hemasphere* 2021; 5:e602.

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Besse L, Besse A, Mendez Lopez M, Vasickova K, Sedlackova M, Vanhara P, Kraus M, Bader J, Ferreira R, Castellano R, Law B, Driessen C. A metabolic switch in proteasome inhibitor-resistant multiple myeloma ensures higher mitochondrial metabolism, protein folding and sphingomyelin synthesis. *Haematologica* 2019; 104:e415–e419.

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Abt D, Driessen C, Engeler D, Schmid H, Slaby O, Vodinska M, Silzle T, Bader J, Kraus M, Sedlarikova L, Besse A, Besse L. Improving the efficacy of proteasome inhibitors in the treatment of renal cell carcinoma by combination with the human immunodeficiency virus (HIV)-protease inhibitors lopinavir or nelfinavir. *BJU Int* 2017

Besse L, Kraus M, Besse A, Bader J, Silzle T, Mehring T, Driessen C. The first-in-class alkylating HDAC inhibitor EDO-S101 is highly synergistic with proteasome inhibition against multiple myeloma through activation of multiple pathways. *Blood Cancer J* 2017; 7:e589.

Besse A, Besse L, Overkleeft H, Bader J, Kraus M, Morgan G, Weinhold N, Rasche L, Stolze S, Driessen C. Carfilzomib resistance due to ABCB1/MDR1 overexpression is overcome by nelfinavir and lopinavir in multiple myeloma. *Leukemia* 2017; 32:391–401.

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Projects (11)

Genetic contributors of multiple myeloma cells involved in their homing and escape from T-cell recognition

Fundamental Research - Jul 1, 2022 - Jun 30, 2023

Automatically Closed

ALK-Inhibitoren als potentielle Therapie bei Proteasom-Inhibitor-resistentem Multiplen Myelom

Fundamental Research - Oct 1, 2021 - Sep 30, 2023

Automatically Closed

Immunoproteasome activity as a predictive marker and therapeutic target in hematological malignancies

Fundamental Research - Jul 1, 2021 - Dec 31, 2021

Automatically Closed

Towards identification of novel therapeutic targets: Assessment of proteasome-related alterations in MM patients' datasets

Fundamental Research - Jan 1, 2021 - Dec 31, 2021

Automatically Closed

The molecular landscape of proteasome inhibitor resistance of multiple myeloma in vivo

Fundamental Research - Jul 1, 2020 - Dec 31, 2023

Ongoing

Revealing molecular basis of cardiotoxicity of carfilzomib towards its safer use in the patients with multiple myeloma

Fundamental Research - Mar 1, 2020 - Feb 28, 2021

Automatically Closed

The „seed and soil“-based pathogenesis of proteasome inhibitor resistance in multiple myeloma

Fundamental Research - Jan 1, 2019 - Dec 31, 2019

Automatically Closed

Identifying and targeting the "Achilles' heel" in proteasome inhibitor-resistant multiple myeloma

Fundamental Research - Oct 1, 2018 - Dec 31, 2021

Automatically Closed

Preclinical investigation of cardiotoxicity as a clinically important side effect of proteasome inhibitor-based therapy

Fundamental Research - Jul 1, 2017 - Jun 30, 2018

Automatically Closed

HIV-Proteaseinhibitoren als Basis für Krebstherapie: Verständnis des Mechanismus, Identifikation der Targets, Entwicklung wirksamerer Substanzen

Fundamental Research - Nov 1, 2016 - Oct 31, 2018

Automatically Closed

Proteasominhibitor-resistentes Multiples Myelom: Biologie und Therapieoptionen

Fundamental Research - Jan 5, 2015 - Dec 31, 2015

Automatically Closed

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