

## Andreas Villunger

### Biographical sketch

Andreas Villunger is full professor at the Medical University in Innsbruck, Austria, where he heads the Division of Developmental Immunology at the MUI-Biocenter, where he is also currently managing director. He has a strong track record in generating and analyzing genetically modified mouse models and has first characterized the physiological functions of the BH3-only proteins PUMA and Noxa as well as of related Bmf. He also explored the role of BH3-only proteins in different models of lymphatic malignancies, including E $\mu$ -Myc and  $\gamma$ -irradiation driven lymphomas, thereby demonstrating that pro-death genes can unexpectedly also exert tumour-promoting functions. In the recent past his research focuses on the interaction of the cell death and cell cycle machineries and the role of the PIDDosome in (sterile) inflammation and the cellular p53 response.

### Curriculum vitae

Biozentrum der Medizinischen Universität Innsbruck  
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5 August 1967

#### Date of birth

#### Place of birth

#### Citizenship

Innsbruck, Austria  
Austrian

### Education

1985 Matura, BORG, Innsbruck, Austria  
1991 Mag. rer. nat in Microbiology, University of Innsbruck, Austria  
1996 Dr. rer. nat (PhD), Department of Internal Medicine, Hemato-Oncology, University of Innsbruck, Austria

### Career History

1997-1998 PostDoc with Prof. Hans Grunike, Institute for Med. Biochemistry, University of Innsbruck, Austria  
1998-2002 PostDoc with Prof. Andreas Strasser, Walter & Eliza Hall Institute, Melbourne, Australia  
2003-2007 Assistant Professor, Experimental Pathology & Immunology Division, Medical University Innsbruck (MUI)  
2004 Associate Professor and Habilitation in Immunology  
2007-2009 §99 Professorship (junior professor) for Developmental Immunology, MUI  
since 2009 §98 Professorship (full professor) for Developmental Immunology, MUI

### Fellowships, Awards

Erwin Schrödinger Fellowship (FWF) long-term fellowship (1998/1999)  
HFSP long-term fellowship (2000/2001)  
Leukemia Research Fellowship (2002)  
Erwin Schrödinger Return Fellowship (2003)  
START prize (FWF) (2003)  
ERC\_AdG (ERC) (2018)

**Publications**      Number of publications=159, h-index=55, cited>11300  
average citation per item >70  
[Google Scholar link](#)

**Patents**              None

**Other Functions**    Reviewer for funding agencies: DFG, CRUK, MRC, SNF, FWO, Swiss Cancer League, Science Foundation Ireland, .....

Reviewer for scientific journals: Science, Nature, Nature Medicine, Cell Stem Cell, Mol Cell, Genes & Development, Immunity, EMBO J, PNAS,.....

Editor for Cell Death & Differentiation and the FEBS Journal,

Deputy speaker of the Doctoral School: Molecular Cell Biology & Oncology and the Molecular Oncology PhD program at MUI, Managing Director of the MUI Biocenter; Deputy Speaker of the DFG-funded research group FOR2036

**Research Interests**    Lymphocyte development and transformation, innate and adoptive immunity, cell death signaling, Bcl2 family proteins, caspases, inflammation, p53 signaling

**Funds obtained (in €, 5 most important ones)**

<b>SFB021 (F2117)</b> , Cell proliferation and cell death in tumors	1.100.000	FWF	2004-2013
<b>FWF-START (Y212-B12)</b> , Assessing the drug-target potential of BH3-only proteins	1.200.000	FWF	2003-2009
<b>Stand-alone grant (06-440)</b> , Exploring the tumor suppressor potential of the BH3-only protein BMF	280.000	WWCR	2006-2009
<b>FOR2036_I1298</b> New insights into the BCL2 Family	700.000	FWF/DFG	2014-2019
<b>ERC_Advanced Grant POLICE</b>	2.400.000	ERC	2018-2022

**PhD students since 2013**

PhD Student	PhD Thesis	Start	Defense	Paper
Lukas Peintner	Investigating the role of the PIDDosome in tumor suppression	2011	2015	7
Maja Sochalska	Defining the role of the anti-apoptotic BCL2 family member A1 in hematopoiesis	2011	2015	5
Fabian Schuler	Defining the role of CHK1 in normal hematopoiesis and transformation	2012	2017	10
Selma Tuzlak	Understanding the role of A1 in adaptive immunity and autoimmune disease	2012	2017	11
Manuel Haschka	Investigating the role of BH3-only proteins in cell death upon mitotic arrest	2013	ongoing	9
Katia Schöler	Regulation of the BH3-only protein BIM by the miR17-92 axis	2015	ongoing	1
Valentina Sladky	Understanding the role of the PIDDosome in liver regeneration and transformation	2015	ongoing	3

Gerlinde Karbon (MCBO)	Understanding the role of BCL2 regulated cell death in genomic stability	2017	ongoing	1
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### International collaborators

	Project	Joint public.	lab for stay abroad
Sharad Kumar (Univ. of Adelaide, AUS)	Caspase-2 in cell death & cell cycle	3	yes
Andreas Strasser (WEHI, Melbourne, AUS)	BCL2 family in lymphocyte development	32	yes
Georg Häcker (Univ. Freiburg, GER)	Cell death regulation in myelopoiesis	9	yes
Floris Foijer (ERIBA, Groningen, NL)	Genomic instability	0	yes

### Andreas Villunger; 10 most important scientific publications

1. The PIDDosome activates p53 in response to supernumerary centrosomes. Fava LL, Schuler F, Sladky V, Haschka MD, Soratroi C, Eiterer L, Demetz E, Weiss G, Geley S, Nigg EA, **Villunger A. Genes Dev.** 2017 Jan 1;31(1):34-45.
2. The NOXA-MCL1-BIM axis defines lifespan on extended mitotic arrest. Haschka MD, Soratroi C, Kirschnek S, Häcker G, Hilbe R, Geley S, **Villunger A\***, Fava LL\*. **Nat Commun.** 2015 Apr 29;6:6891. doi: 10.1038/ncomms7891. (\*shared senior author)
3. Deregulated cell death and lymphocyte homeostasis causes premature lethality in mice lacking the BH3-only proteins Bim and Bmf. Labi V, Woess C, Tuzlak S, Erlacher M, Bouillet P, Strasser A, Tzankov A, **Villunger A. Blood.** 2014 Apr 24;123(17):2652-62.
4. PIDDosome-independent tumor suppression by Caspase-2. Manzl C, Peintner L, Krumschnabel G, Bock F, Labi V, Drach M, Newbold A, Johnstone R, **Villunger A. Cell Death Differ.** 2012. 19(10): 1722-32. doi: 10.1038/cdd.2012.54. PMID: 22595758.
5. Apoptosis of leukocytes triggered by acute DNA damage promotes lymphoma formation. Labi V, Erlacher M, Krumschnabel G, Manzl C, Tzankov A, Pinon J, Egle A, **Villunger A. Genes Dev.** 2010. 24(15):1602-7.
6. Caspase-2 activation in the absence of PIDDosome formation. Manzl C, Krumschnabel G, Bock F, Sohm B, Labi V, Baumgartner F, Logette E, Tschopp J, **Villunger A. J Cell Biol.** 2009. 185(2):291-303.
7. Loss of the BH3-only protein Bmf impairs B cell homeostasis and accelerates gamma irradiation-induced thymic lymphoma development. Labi V, Erlacher M, Kiessling S, Manzl C, Frenzel A, O'Reilly L, Strasser A, **Villunger A. J Exp Med.** 2008. 205(3):641-55.
8. Puma cooperates with Bim, the rate-limiting BH3-only protein in cell death during lymphocyte development, in apoptosis induction. Erlacher M, Labi V, Manzl C, Bock G, Tzankov A, Hacker G, Michalak E, Strasser A, **Villunger A. J Exp Med.** 2006. 203(13):2939-51.
9. BH3-only proteins Puma and Bim are rate-limiting for gamma-radiation- and glucocorticoid-induced apoptosis of lymphoid cells in vivo. Erlacher M, Michalak EM, Kelly PN, Labi V, Niederegger H, Coultas L, Adams JM, Strasser A, **Villunger A. Blood.** 2005. 106(13):4131-8.
10. p53- and drug-induced apoptotic responses mediated by BH3-only proteins Puma and Noxa. **Villunger A**, Michalak EM, Coultas L, Mullauer F, Bock G, Ausserlechner M, Adams JM, Strasser A. **Science.** 2003. 302(5647):1036-8. doi: 10.1126/science.1090072. PMID: 14500851.

## Andreas Villunger; all publications since 2013

1. Tuzlak S, Haschka MD, Mokina AM, Rüllicke T, Cory S, Labi V, **Villunger A**. Differential effects of Vav-promoter-driven overexpression of BCLX and BFL1 on lymphocyte survival and B cell lymphomagenesis. **FEBS J**. 2018 Mar 2. doi:10.1111/febs.14426. [Epub ahead of print] PubMed PMID: 29498802.
2. Haschka M, Karbon G, Fava LL, **Villunger A**. Perturbing mitosis for anti-cancer therapy: is cell death the only answer? **EMBO Rep**. 2018 Mar;19(3). pii: e45440. doi: 10.15252/embr.201745440. Epub 2018 Feb 19. Review. PubMed PMID: 29459486; PubMed Central PMCID: PMC5836099.
3. Galluzzi L, Vitale I, Aaronson SA, Abrams JM, Adam D, Agostinis P, Alnemri ES, Altucci L, Amelio I, Andrews DW, Annicchiarico-Petruzzelli M, Antonov AV, Arama E, Baehrecke EH, Barlev NA, ..... **Villunger A**, Virgin HW, Vousden KH, Vucic D, Wagner EF, Walczak H, Wallach D, Wang Y, Wells JA, Wood W, Yuan J, Zakeri Z, Zhivotovsky B, Zitvogel L, Melino G, Kroemer G. Molecular mechanisms of cell death: recommendations of the Nomenclature Committee on Cell Death 2018. **Cell Death Differ**. 2018 Mar;25(3):486-541. doi: 10.1038/s41418-017-0012-4. Epub 2018 Jan 23. Review. PubMed PMID: 29362479.
4. Rabachini T, Fernandez-Marrero Y, Montani M, Loforese G, Sladky V, He Z, Bachmann D, Wicki S, **Villunger A**, Stroka D, Kaufmann T. BOK promotes chemical-induced hepatocarcinogenesis in mice. **Cell Death Differ**. 2018 Mar;25(4):706-718. doi: 10.1038/s41418-017-0008-0. Epub 2017 Dec 11. PubMed PMID: 29229991.
5. Schuler F, Weiss JG, Lindner SE, Lohmüller M, Herzog S, Spiegl SF, Menke P, Geley S, Labi V, **Villunger A**. Checkpoint kinase 1 is essential for normal B cell development and lymphomagenesis. **Nat Commun**. 2017 Nov 22;8(1):1697. doi:10.1038/s41467-017-01850-4. PubMed PMID: 29167438; PubMed Central PMCID: PMC5700047.
6. Müller L, Hainberger D, Stolz V, Hamminger P, Hassan H, Preglej T, Boucheron N, Sakaguchi S, Wiegers GJ, **Villunger A**, Auwerx J, Ellmeier W. The corepressor NCOR1 regulates the survival of single-positive thymocytes. **Sci Rep**. 2017 Nov 21;7(1):15928. doi: 10.1038/s41598-017-15918-0. PubMed PMID: 29162920; PubMed Central PMCID: PMC5698297.
7. Sladky V, Schuler F, Fava LL, **Villunger A**. The resurrection of the PIDDosome - emerging roles in the DNA-damage response and centrosome surveillance. **J Cell Sci**. 2017 Nov 15;130(22):3779-3787. doi: 10.1242/jcs.203448. Review. PubMed PMID: 29142064.
8. Ottina E, Peperzak V, Schoeler K, Carrington E, Sgonc R, Pellegrini M, Preston S, Herold MJ, Strasser A, **Villunger A**. DNA-binding of the Tet-transactivator curtails antigen-induced lymphocyte activation in mice. **Nat Commun**. 2017 Oct 18;8(1):1028. doi: 10.1038/s41467-017-01022-4. PubMed PMID: 29044097; PubMed Central PMCID: PMC5647323.
9. Gulen MF, Koch U, Haag SM, Schuler F, Apetoh L, **Villunger A**, Radtke F, Ablasser A. Signalling strength determines proapoptotic functions of STING. **Nat Commun**. 2017 Sep 5;8(1):427. doi: 10.1038/s41467-017-00573-w. PubMed PMID: 28874664; PubMed Central PMCID: PMC5585373.
10. Rocamora-Reverte L, Reichardt HM, **Villunger A**, Wiegers G. T-cell autonomous death induced by regeneration of inert glucocorticoid metabolites. **Cell Death Dis**. 2017 Jul 20;8(7):e2948. doi: 10.1038/cddis.2017.344. PubMed PMID: 28726773; PubMed Central PMCID: PMC5550885.
11. Lindner SE, Lohmüller M, Kotkamp B, Schuler F, Knust Z, **Villunger A**, Herzog S. The miR-15 family reinforces the transition from proliferation to differentiation in pre-B cells. **EMBO Rep**.

- 2017 Sep;18(9):1604-1617. doi: 10.15252/embr.201643735. Epub 2017 Jul 13. PubMed PMID: 28705801; PubMed Central PMCID: PMC5579393.
12. Ebner F, Sedlyarov V, Tasciyan S, Ivin M, Kratochvill F, Gratz N, Kenner L, **Villunger A**, Sixt M, Kovarik P. The RNA-binding protein tristetraprolin schedules apoptosis of pathogen-engaged neutrophils during bacterial infection. **J Clin Invest**. 2017 Jun 1;127(6):2051-2065. doi: 10.1172/JCI80631. Epub 2017 May 15. PubMed PMID: 28504646; PubMed Central PMCID: PMC5451238.
  13. Haschka MD, **Villunger A**. There is something about BOK we just don't get yet. **FEBS J**. 2017 Mar;284(5):708-710. doi: 10.1111/febs.14031. PubMed PMID: 28262002.
  14. Voráčová K, Hájek J, Mareš J, Urajová P, Kuzma M, Cheel J, **Villunger A**, Kapuscik A, Bally M, Novák P, Kabeláč M, Krumschnabel G, Lukeš M, Voloshko L, Kopecký J, Hrouzek P. The cyanobacterial metabolite nocuolin a is a natural oxadiazine that triggers apoptosis in human cancer cells. **PLoS One**. 2017 Mar 2;12(3):e0172850. doi: 10.1371/journal.pone.0172850. eCollection 2017. PubMed PMID: 28253280; PubMed Central PMCID: PMC5333925.
  15. Fava LL, Schuler F, Sladky V, Haschka MD, Soratroi C, Eiterer L, Demetz E, Weiss G, Geley S, Nigg EA, **Villunger A**. The PIDDosome activates p53 in response to supernumerary centrosomes. **Genes Dev**. 2017 Jan 1;31(1):34-45. doi: 10.1101/gad.289728.116. PubMed PMID: 28130345; PubMed Central PMCID: PMC5287111.
  16. Tuzlak S, Schenk RL, Vasanthakumar A, Preston SP, Haschka MD, Zotos D, Kallies A, Strasser A, **Villunger A**, Herold MJ. The BCL-2 pro-survival protein A1 is dispensable for T cell homeostasis on viral infection. **Cell Death Differ**. 2017 Mar;24(3):523-533. doi: 10.1038/cdd.2016.155. Epub 2017 Jan 13. PubMed PMID: 28085151; PubMed Central PMCID: PMC5344212.
  17. Schenk RL, Tuzlak S, Carrington EM, Zhan Y, Heinzl S, Teh CE, Gray DH, Tai L, Lew AM, **Villunger A**, Strasser A, Herold MJ. Characterisation of mice lacking all functional isoforms of the pro-survival BCL-2 family member A1 reveals minor defects in the haematopoietic compartment. **Cell Death Differ**. 2017 Mar;24(3):534-545. doi: 10.1038/cdd.2016.156. Epub 2017 Jan 13. PubMed PMID: 28085150; PubMed Central PMCID: PMC5344213.
  18. Tuzlak S, Kaufmann T, **Villunger A**. Interrogating the relevance of mitochondrial apoptosis for vertebrate development and postnatal tissue homeostasis. **Genes Dev**. 2016 Oct 1;30(19):2133-2151. Review. PubMed PMID: 27798841; PubMed Central PMCID: PMC5088563.
  19. Sochalska M, Schuler F, Weiss JG, Prchal-Murphy M, Sexl V, **Villunger A**. MYC selects against reduced BCL2A1/A1 protein expression during B cell lymphomagenesis. **Oncogene**. 2017 Apr;36(15):2066-2073. doi: 10.1038/onc.2016.362. Epub 2016 Oct 3. PubMed PMID: 27694901; PubMed Central PMCID: PMC5395700.
  20. Brand A, Singer K, Koehl GE, Kolitzus M, Schoenhammer G, Thiel A, Matos C, Bruss C, Klobuch S, Peter K, Kastenberger M, Bogdan C, Schleicher U, Mackensen A, Ullrich E, Fichtner-Feigl S, Kesselring R, Mack M, Ritter U, Schmid M, Blank C, Dettmer K, Oefner PJ, Hoffmann P, Walenta S, Geissler EK, Pouyssegur J, **Villunger A**, Steven A, Seliger B, Schreml S, Haferkamp S, Kohl E, Karrer S, Berneburg M, Herr W, Mueller-Klieser W, Renner K, Kreutz M. LDHA-Associated Lactic Acid Production Blunts Tumor Immunosurveillance by T and NK Cells. **Cell Metab**. 2016 Nov 8;24(5):657-671. doi: 10.1016/j.cmet.2016.08.011. Epub 2016 Sep 15. PubMed PMID: 27641098.
  21. Derudder E, Herzog S, Labi V, Yasuda T, Köchert K, Janz M, **Villunger A**, Schmidt-Supprian M, Rajewsky K. Canonical NF- $\kappa$ B signaling is uniquely required for the long-term persistence of functional mature B cells. **Proc Natl Acad Sci U S A**. 2016 May 3;113(18):5065-70. doi:

- 10.1073/pnas.1604529113. Epub 2016 Apr 20. PubMed PMID: 27099294; PubMed Central PMCID: PMC4983837.
22. García Sáez AJ, **Villunger A**. MOMP in the absence of BH3-only proteins. **Genes Dev.** 2016 Apr 15;30(8):878-80. doi: 10.1101/gad.281519.116. PubMed PMID: 27083995; PubMed Central PMCID: PMC4840294.
  23. Sakamoto K, Wehde BL, Yoo KH, Kim T, Rajbhandari N, Shin HY, Triplett AA, Rädler PD, Schuler F, **Villunger A**, Kang K, Hennighausen L, Wagner KU. Janus Kinase 1 Is Essential for Inflammatory Cytokine Signaling and Mammary Gland Remodeling. **Mol Cell Biol.** 2016 May 16;36(11):1673-90. doi: 10.1128/MCB.00999-15. Print 2016 Jun 1. PubMed PMID: 27044867; PubMed Central PMCID: PMC4959311.
  24. Bauer E, Schleder M, Scheicher R, Horvath J, Aigner P, Schiefer AI, Kain R, Regele H, Hoermann G, Steiner G, Kenner L, Sexl V, **Villunger A**, Moriggl R, Stoiber D. Cooperation of ETV6/RUNX1 and BCL2 enhances immunoglobulin production and accelerates glomerulonephritis in transgenic mice. **Oncotarget.** 2016 Mar 15;7(11):12191-205. doi: 10.18632/oncotarget.7687. PubMed PMID: 26919255; PubMed Central PMCID: PMC4914278.
  25. Podmirseg SR, Jäkel H, Ranches GD, Kullmann MK, Sohm B, **Villunger A**, Lindner H, Hengst L. Caspases uncouple p27(Kip1) from cell cycle regulated degradation and abolish its ability to stimulate cell migration and invasion. **Oncogene.** 2016 Sep 1;35(35):4580-90. doi: 10.1038/onc.2015.524. Epub 2016 Feb 1. PubMed PMID: 26829051; PubMed Central PMCID: PMC4854979.
  26. Sochalska M, Ottina E, Tuzlak S, Herzog S, Herold M, **Villunger A**. Conditional knockdown of BCL2A1 reveals rate-limiting roles in BCR-dependent B-cell survival. **Cell Death Differ.** 2016 Apr;23(4):628-39. doi: 10.1038/cdd.2015.130. Epub 2015 Oct 9. PubMed PMID: 26450454; PubMed Central PMCID: PMC4986635.
  27. Hermann-Kleiter N, Klepsch V, Wallner S, Siegmund K, Klepsch S, Tuzlak S, **Villunger A**, Kaminski S, Pfeifhofer-Obermair C, Gruber T, Wolf D, Baier G. The Nuclear Orphan Receptor NR2F6 Is a Central Checkpoint for Cancer Immune Surveillance. **Cell Rep.** 2015 Sep 29;12(12):2072-85. doi: 10.1016/j.celrep.2015.08.035. Epub 2015 Sep 17. PubMed PMID: 26387951; PubMed Central PMCID: PMC4594157.
  28. Fava LL, Rainer J, Haschka MD, Geley S, **Villunger A**. Beclin 1 is dispensable for chromosome congression and proper outer kinetochore assembly. **EMBO Rep.** 2015 Oct;16(10):1233-6. doi: 10.15252/embr.201540731. Epub 2015 Aug 20. PubMed PMID: 26297610; PubMed Central PMCID: PMC4766455.
  29. Woess C, Drach M, **Villunger A**, Tappert R, Stalder R, Pallua JD. Application of mid-infrared (MIR) microscopy imaging for discrimination between follicular hyperplasia and follicular lymphoma in transgenic mice. **Analyst.** 2015 Sep 21;140(18):6363-72. doi: 10.1039/c5an01072a. PubMed PMID: 26236782; PubMed Central PMCID: PMC4562367.
  30. Knackmuss U, Lindner SE, Aneichyk T, Kotkamp B, Knust Z, **Villunger A**, Herzog S. MAP3K11 is a tumor suppressor targeted by the oncomiR miR-125b in early B cells. **Cell Death Differ.** 2016 Feb;23(2):242-52. doi: 10.1038/cdd.2015.87. Epub 2015 Jul 3. PubMed PMID: 26138442; PubMed Central PMCID: PMC4678593.
  31. Bock FJ, Tanzer MC, Haschka MD, Krumschnabel G, Sohm B, Goetsch K, Kofler R, **Villunger A**. The p53 binding protein PDCD5 is not rate-limiting in DNA damage induced cell death. **Sci Rep.** 2015 Jun 11;5:11268. doi: 10.1038/srep11268. PubMed PMID: 26062895; PubMed Central PMCID: PMC4462756.

32. Schuler F, Baumgartner F, Klepsch V, Chamson M, Müller-Holzner E, Watson CJ, Oh S, Hennighausen L, Tymoszyk P, Doppler W, **Villunger A**. The BH3-only protein BIM contributes to late-stage involution in the mouse mammary gland. **Cell Death Differ**. 2016 Jan;23(1):41-51. doi: 10.1038/cdd.2015.61. Epub 2015 Jun 5. PubMed PMID: 26045049; PubMed Central PMCID: PMC4815977.
33. Amort M, Nachbauer B, Tuzlak S, Kieser A, Schepers A, **Villunger A**, Polacek N. Expression of the vault RNA protects cells from undergoing apoptosis. **Nat Commun**. 2015 May 8;6:7030. doi: 10.1038/ncomms8030. PubMed PMID: 25952297; PubMed Central PMCID: PMC4430821.
34. Haschka MD, Soratroi C, Kirschnek S, Häcker G, Hilbe R, Geley S, **Villunger A**, Fava LL. The NOXA-MCL1-BIM axis defines lifespan on extended mitotic arrest. **Nat Commun**. 2015 Apr 29;6:6891. doi: 10.1038/ncomms7891. PubMed PMID: 25922916; PubMed Central PMCID: PMC4423218.
35. Peintner L, Dorstyn L, Kumar S, Aneichyk T, **Villunger A**, Manzl C. The tumor-modulatory effects of Caspase-2 and Pidd1 do not require the scaffold protein Raidd. **Cell Death Differ**. 2015 Nov;22(11):1803-11. doi:10.1038/cdd.2015.31. Epub 2015 Apr 10. PubMed PMID: 25857265; PubMed Central PMCID: PMC4648327.
36. Woess C, Tuzlak S, Labi V, Drach M, Bertele D, Schneider P, **Villunger A**. Combined loss of the BH3-only proteins Bim and Bmf restores B-cell development and function in TACI-Ig transgenic mice. **Cell Death Differ**. 2015 Sep;22(9):1477-88. doi: 10.1038/cdd.2015.8. Epub 2015 Feb 20. PubMed PMID: 25698446; PubMed Central PMCID: PMC4532784.
37. Piatti P, Lim CY, Nat R, **Villunger A**, Geley S, Shue YT, Soratroi C, Moser M, Lusser A. Embryonic stem cell differentiation requires full length Chd1. **Sci Rep**. 2015 Jan 26;5:8007. doi: 10.1038/srep08007. PubMed PMID: 25620209; PubMed Central PMCID: PMC4306112.
38. Ottina E, Sochalska M, Sgonc R, **Villunger A**. The BH3-only protein Bad is dispensable for TNF-mediated cell death. **Cell Death Dis**. 2015 Jan 22;6:e1611. doi: 10.1038/cddis.2014.575. PubMed PMID: 25611386; PubMed Central PMCID: PMC4669773.
39. Sochalska M, Tuzlak S, Egle A, **Villunger A**. Lessons from gain- and loss-of-function models of pro-survival Bcl2 family proteins: implications for targeted therapy. **FEBS J**. 2015 Mar;282(5):834-849. doi: 10.1111/febs.13188. Epub 2015 Jan 23. Review. PubMed PMID: 25559680; PubMed Central PMCID: PMC4562365.
40. Ottina E, Lyberg K, Sochalska M, **Villunger A**, Nilsson GP. Knockdown of the antiapoptotic Bcl-2 family member A1/Bfl-1 protects mice from anaphylaxis. **J Immunol**. 2015 Feb 1;194(3):1316-22. doi: 10.4049/jimmunol.1400637. Epub 2014 Dec 29. PubMed PMID: 25548219; PubMed Central PMCID: PMC4298126.
41. Farrés J, Llacuna L, Martín-Caballero J, Martínez C, Lozano JJ, Ampurdanés C, López-Contreras AJ, Florensa L, Navarro J, Ottina E, Dantzer F, Schreiber V, **Villunger A**, Fernández-Capetillo O, Yélamos J. PARP-2 sustains erythropoiesis in mice by limiting replicative stress in erythroid progenitors. **Cell Death Differ**. 2015 Jul;22(7):1144-57. doi: 10.1038/cdd.2014.202. Epub 2014 Dec 12. PubMed PMID: 25501596; PubMed Central PMCID: PMC4568570.
42. Galluzzi L, Bravo-San Pedro JM, Vitale I, Aaronson SA, Abrams JM, Adam D, Alnemri ES, Altucci L, Andrews D, .....Vandenabeele P, **Villunger A**, Wagner EF, Walczak H, White E, Wood WG, Yuan J, Zakeri Z, Zhivotovsky B, Melino G, Kroemer G. Essential versus accessory aspects of cell death: recommendations of the NCCD 2015. **Cell Death Differ**. 2015 Jan;22(1):58-73. doi: 10.1038/cdd.2014.137. Epub 2014 Sep 19. Review. PubMed PMID: 25236395; PubMed Central PMCID: PMC4262782.

43. Fava LL, **Villunger A**. Stop competing, start talking! **EMBO J**. 2014 Sep 1;33(17):1849-51. doi: 10.15252/embj.201489466. Epub 2014 Jul 25. PubMed PMID: 25063676; PubMed Central PMCID: PMC4195780.
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