

- **Name:** Himisha Beltran
- **Current Position & Affiliation:** Associate Professor, Harvard Medical School (HMS), Boston, MA
- **Country:** USA

Educational Background:

2000	B.S.	Biology	University of Oregon, Eugene, OR
2004	M.D.	Medicine	New York Medical College, Valhalla, NY

Professional Experience:
Faculty Academic Appointments

07/11-12/17	Assistant Professor	Medical Oncology	WCM
12/17-09/18	Associate Professor	Medical Oncology	WCM
09/18-Current	Associate Professor	Medicine	Harvard Medical School (HMS), Boston, MA

Appointments at Hospitals/Affiliated Institutions

07/11-12/17	Assistant Attending Physician	Medical Oncology	Wynnewood, PA, New York Presbyterian Hospital, (NYP), New York, NY
12/17-09/18	Associate Attending	Medical Oncology	NYP
09/18-	Physician	Medical Oncology	Dana Farber Cancer Institute, (DFCI), Boston, MA
09/18-	Associate Physician	Medical Oncology	Brigham and Women's Hospital (BWH), Boston, MA
09/18-	Associate Member	Cancer Program	The Broad Institute, Cambridge, MA

Professional Organizations:

2003-	Alpha Omega Alpha (AOA)	Member, Early Induction
2009-	American Association for Cancer Research (AACR) 2011	President, Iota Chapter 2003-2004 Member
2009-	Women in Cancer Research (WICR)	Mentor, Science Education Committee
2009-	American Society of Clinical Oncology (ASCO)	Member
2021-	ANZUP (The Australian and New Zealand Urogenital and Prostate Cancer Trials Group)	Member
2021-	American Society for Clinical Investigation (ASCI)	Elected Member

Main Scientific Publications:
Peer Reviewed Publications in print or other media

Research investigations

1. He MX, Cuoco MS, Crowdis J, Bosma-Moody A, Zhang Z, Bi K, Kanodia A, Su MJ, Ku SY, Garcia MM, Sweet AR, Rodman C, DelloStritto L, Silver R, Steinharter J, Shah P, Izar B, Walk NC, Burke KP, Bakouny Z, Tewari AK, Liu D, Camp SY, Vokes NI, Salari K, Park J, Vigneau S, Fong L, Russo JW, Yuan X, Balk SP, Beltran H, Rozenblatt-Rosen O, Regev A, Rotem A, Taplin ME, Van Allen E, Transcriptional mediators of treatment resistance in lethal prostate cancer, *Nature Medicine*, 2021 Mar 4. doi: 10.1038/s41591-021-01244-6. Online ahead of print. PMID: 33664492
2. Hongo H, Kosaka T, Hayashi H, Nakamura K, Nishihara H, Mikami S, Beltran H, Oya M, Germline BRCA2 mutation in a case of aggressive prostate cancer accompanied by spinal bulbar muscular atrophy, *Asian J Androl*. 2021 May 21. doi: 10.4103/aja.aja_37_21. Online ahead of print.
3. Baca SC, Takeda D, Seo JH, Hwang J, Ku SY, Arafteh R, Arnoff T, Fonseca S, Glambartolomei C, Cejas P, Lim K, He M, Sheahan A, Nasar A, Berchuck J, brown L, Nguyen HH, Coleman I, Kaipainen A, Nelson P, Morrissey C, Korthauer K, Pomeranz M, Ellis L, Pasaniuc P, Lawrenson K, Kelly K, Zoubeidi A, Hahn WC, Beltran H, Long HW, Brown M, Corey E, Freedman, Reprogramming of the FOXA1 cistrome in treatment-emergent neuroendocrine prostate cancer, *Nat Commun*. 2021 Mar 30;12(1):1979. doi: 10.1038/s41467-021-22139-7.
4. Gjyzezi A, Galletti G, Zhang J, Worroll D, Sigouros M, Kim S, Nanus DM, Scandura J, Sboner A, Beltran H, Tagawa S, Giannakakou P, Heterogeneous AR-variant expression in prostate cancer according to differentiation stage, *Comm Biol*. 2021 Jun 24;4(1):785. doi: 10.1038/s42003-021-02321-9.
5. Conteduca V, Ku SK, Fernandez L, Rodriguez A, Lee J, Jendrisak A, Slade M, Gilbertson C, Manohar J, Sigouros M, Wang Y, Dittamore R, Wenstrup R, Mosquera JM, Schonhoft JD, Beltran H*, Circulating tumor cell heterogeneity in neuroendocrine prostate cancer by single cell copy number analysis, *NPJ Precis Oncol*. 2021 Aug 12;5(1):76. doi: 10.1038/s41698-021-00211-1. *Corresponding Author
6. Sandhu S, Moore C, Chiong E, Beltran H, Bristow RG, Williams S, Prostate Cancer, *Lancet*. 2021 Aug 6:S0140-6736(21)00950-8. doi: 10.1016/S0140-6736(21)00950-8. Online ahead of print.
7. Beltran H* and Demichelis F, Therapy Considerations in Neuroendocrine Prostate Cancer, *Endocr Relat Cancer*. 2021 Jun 1:ERC-21-0140.R1. doi: 10.1530/ERC-21-0140. Online ahead of print. *Corresponding author
8. Hofmann MR, Hussain M, Dehm SM, Beltran H, Wyatt AW, Halabi S, Sweeney C, Scher HI, Ryan CJ, Feng FY, Attard G, Klein E, Miyahira AK, Soule HR, Sharifi N. Prostate Cancer Foundation Hormone-Sensitive Prostate Cancer Biomarker Working Group Meeting Summary. *Urology*. 2020 Dec 26:S0090-4295(20)31519-3. doi: 10.1016/j.urology.2020.12.021. Epub ahead of print. PMID: 33373705.
9. Yamada Y and Beltran H*, The Treatment Landscape of Metastatic Prostate Cancer, *Cancer Lett*. 2021 Jun 18;519:20-29. doi: 10.1016/j.canlet.2021.06.010. Online ahead of print *Corresponding author
10. Brady NJ, Bagadion AM, Singh R, Conteduca V, Van Emmenis L, Arceci E, Pakula H, Carelli R, Khani F, Bakht M, Sigouros M, Bareja R, Sboner A, Elemento O, Tagawa S, Nanus DM, Loda M, Beltran H, Robinson B, Rickman DS. Temporal evolution of cellular heterogeneity during the progression to advanced AR-negative prostate cancer. *Nat Commun*. 2021 Jun 7;12(1):3372. doi: 10.1038/s41467-021-23780-y. PMID: 34099734; PMCID: PMC8185096.
11. Jasu J, Tolonez T, Antonorakis E, Beltran H, Halabi S, Eisenberger M, Carducci M, Loriot Y, Van der Eecken K, Lolkemas M, Ryan CJ, Taavitsainen S, Hognas G, Talvitie T, Taylor RJ, Koskenalho A, Murtola T, Jukkkola A, Visakorkpi T, Tammela T, Auvinen A, Kujala P, Smith

- TJ, Kelloskumpu- Lehtinen P, Issaacs W, Nykter M, Kesseli, J, Bova S, Combined longitudinal clinical phenotyping and autopsy diagnostic findings in 33 men with lethal metastatic prostate cancer: recommendations for advancing precision medicine for prostate cancers at high risk of metastasis, *Eur Urol Open Sci.* 2021 Jul 2;30:47-62. doi: 10.1016/j.euros.2021.05.011
12. Kim DH, Sun D, Storck WK, Welker Leng KR, Jenkins C, Coleman DJ, Sampson DA, Guan X, Kumaraswamy A, Rodansky ES, Urrutia JA, Schwartzman J, Zhang C, Beltran H, Labrecque MP, Morrissey C, Lucas JM, Coleman I, Nelson PS, Corey E, Handelman SK, Sexton JZ, Aggarwal R, Abida W, Feng FY, Small EJ, Spratt DE, Bankhead A, Rao A, Gesner EM, Attwell S, Lakhota S, Campeau E, Yates JA, Xia Z, Alumkal JJ. BET Bromodomain Inhibition Blocks an AR-Repressed, E2F1-Activated Treatment-Emergent Neuroendocrine Prostate Cancer Lineage Plasticity Program. *Clin Cancer Res.* 2021 Jun 18:clincanres.4968.2020. doi: 10.1158/1078-0432.CCR-20-4968. Epub ahead of print. PMID: 34145028
 13. Mansfield A, Hong D, Hann C, Farago A, Beltran H, Waqar S, Hendifar A, Anthony L, Taylor M, Bryce A, Tagawa ST, Lewis K, Niu J, Chung CH, Cleary JM, Rossi M, Ludwig C, Valenzuela R, Luo Y, Aggarwal R, A Phase I/II Study of Rovalpituzumab Tesirine in Delta-Like 3-Expressing Advanced Solid Tumors, *NPJ Precis Oncol.* 2021 Aug 5;5(1):74. doi: 10.1038/s41698-021-00214-y.
 14. Davies A, Nouruzi S, Ganguli D, Namekawa T, Thaper D, Linder S, Karaođlanođlu F, Omur ME, Kim S, Kobelev M, Kumar S, Sivak O, Bostock C, Bishop J, Hoogstraat M, Talal A, Stelloo S, van der Poel H, Bergman AM, Ahmed M, Fazli L, Huang H, Tilley W, Goodrich D, Feng FY, Gleave M, He HH, Hach F, Zwart W, Beltran H, Selth L, Zoubeidi A. An androgen receptor switch underlies lineage infidelity in treatment-resistant prostate cancer. *Nat Cell Biol.* 2021 Sep 6. doi: 10.1038/s41556-021- 00743-5. Online ahead of print. PMID: 34489572
 15. Mahal B, Novel genomic signature predictive of response to immune checkpoint blockade: A pan- cancer analysis from project Genomics Evidence Neoplasia Information Exchange (GENIE), *Cancer Genetics*, in press.
 16. Mosquera MJ, Bareja R, Berhim JM, Asad M, Cheung C, Sigouros M, Prabhu V, Rubin MA, Martin LM, Puca L, Beltran H, Mosquera JM, Elemento O Singh A, Synthetic Hydrogel Tumor Organoids of Patient-derived Prostate Cancer, *Adv Mater.* 2021 Oct 22:e2100096. doi: 10.1002/adma.202100096. Online ahead of print. PMID: 34676924
 17. Morgans AK and Beltran H, A man with newly diagnosed prostate cancer asks “Do I really need more than ADT alone?”, *Journal of Clinical Oncology*, in press
 18. Singh N, Ramnarine VR, Song JH, Pandey R, Padi SKR, Nouri M, Olive V, Kobelev M, Okumura K, McCarthy D, Hanna MM, Mukherjee P, Sun B, Lee BR, Parker JB, Chakravarti D, Warfel NA, Zhou M, Bearss JJ, Gibb EA, Alshalalfa M, Karnes RJ, Small EJ, Aggarwal R, Feng F, Wang Y, Buttyan R, Zoubeidi A, Rubin M, Gleave M, Slack FJ, Davicioni E, Beltran H, Collins C, Kraft AS. The long noncoding RNA H19 regulates tumor plasticity in neuroendocrine prostate cancer. *Nat Commun.* 2021 Dec 21;12(1):7349. doi: 10.1038/s41467-021-26901-9. PMID: 34934057.
 19. Che M, Chaturvedi A, Munro SA, Pitzen SP, Ling A, Zhang W, Mentzer J, Ku SY, Puca L, Zhu Y, Bergman AM, Severson TM, Forster C, Liu Y, Hildebrand J, Daniel M, Wang TY, Selth LA, Hickey T, Zoubeidi A, Gleave M, Bareja R, Sboner A, Tilley W, Carroll JS, Tan W, Kohli M, Yang R, Hsieh AC, Murugan P, Zwart W, Beltran H, Huang ST, Dehm SM, Opposing transcriptional programs of KLF5 and AR emerge during therapy for advanced prostate cancer, *Nat Comm*, 2021 Nov 4;12(1):6377. doi: 10.1038/s41467-021-26612-1.
 20. Beltran H*, Morgans AK. Leveraging Real World Genomic Data to Advance Prostate Cancer Precision Oncology. *Eur Urol.* 2022 Jan;81(1):48-49. doi: 10.1016/j.eururo.2021.10.029. Epub 2021 Nov 4. PMID: 34742584. *corresponding author
 21. Beltran H*, Choudhury AD. Towards Biologically Driven Decision-making in Metastatic

- Hormone-sensitive Prostate Cancer. *Eur Urol Oncol.* 2021 Dec;4(6):924-926. doi: 10.1016/j.euo.2021.11.003. Epub 2021 Nov 29. PMID: 34857503. *corresponding author
22. Bakht MK, Hayward JJ, Shahbazi-Raz F, Meister D, Pillon A, Stover M, Tronchin A, Mader L, Fifield B, Ku SK, Jeong C, Kang KW, Wang Y, Dong Z, Beltran H, Porter LA, Trant JE, Identification of Alternative Protein Targets of Glutamate-Ureido-Lysine Associated with PSMA Tracer Uptake in Prostate Cancer Cells, *Proc Natl Acad Sci U S A.* 2022 Jan 25;119(4):e2025710119. doi: 10.1073/pnas.2025710119. PMID: 35064078; PMCID: PMC8795759.
 23. Nixon AB, Halabi S, Liu Y, Starr MD, Brady JC, Shterev I, Luo B, Hurwitz HI, Febbo PG, Rini BI, Beltran H, Small EJ, Morris MJ, George DJ. Predictive biomarkers of overall survival in patients with renal cell carcinoma treated with interferon alpha +/- bevacizumab: Results from CALGB 90206 (Alliance). *Clin Cancer Res.* 2021 Dec 29:clincanres.2386.2021. doi: 10.1158/1078-0432.CCR-21-2386. Epub ahead of print. PMID: 34965953.
 24. Monga J, Adrianto I, Rogers C, Gadgeel S, Chitale D, Alumkal JJ, Beltran H, Zoubeidi A, Ghosh J. Tribbles 2 pseudokinase confers enzalutamide resistance in prostate cancer by promoting lineage plasticity. *J Biol Chem.* 2021 Dec 29:101556. doi: 10.1016/j.jbc.2021.101556. Epub ahead of print. PMID: 34973338.
 25. Berchuck JE, Baca SC, McClure HM, Korthauer K, Tsai HK, Vitale Nuzzo P, Kelleher KM, He M, Steinharter JA, Zacharia S, Spisak S, Seo JH, Conteduca V, Elemento O, Auh J, Sigouros M, Corey E, Hirsch MS, Taplin ME, Choueiri TK, Pomerantz MM, Beltran H, Freedman ML. Detecting neuroendocrine prostate cancer through tissue-informed cell-free DNA methylation analysis. *Clin Cancer Res.* 2021 Dec 14:clincanres.CCR-21-3762-E.2021. doi: 10.1158/1078-0432.CCR-21-3762. Epub ahead of print. PMID: 34907080.