José Manuel Baselga (1959–2021)

Transformative oncologist who laid the groundwork for precision medicine

By Maurizio Scaltriti

José Manuel Baselga, renowned oncologist, died on 21 March at the age of 61 at his home in La Cerdanya, a beautiful Catalan county surrounded by the Spanish and French Pyrenees. Possibly the greatest drug developer of the past two decades, José was famous for, in his own words, “going to places and changing things.” Throughout his career, he transformed oncology practice and made the development of new treatments his mission.

Born in Barcelona, Spain, on 3 July 1959, José was raised close to the Vall d’Hebron Hospital, an institution on which he would later leave his mark. He graduated from Universitat Autònoma de Barcelona in 1982 with an MD and then fulfilled his military service duty before starting his residency at the Vall d’Hebron Hospital in 1985. With a year left in his residency, José moved to the United States to work at Kings County Hospital in Brooklyn, New York. According to his sister Eulalia, he lived in a modest apartment with windows that would not close in winter, but the accommodations were good enough given that he was rarely home. José would spend his weekends and vacation time at Memorial Sloan Kettering Cancer Center (MSK) running lab experiments. He then moved full time to MSK under the mentorship of oncologists John Mendelsohn and Larry Norton. Together, they worked on newly identified antibodies targeting epidermal growth factor receptor (EGFR) and human epidermal growth factor receptor 2 (HER2), the predecessors of the anticancer therapies cetuximab, approved for the treatment of both colorectal and head and neck cancers, and trastuzumab, which drastically changed the prognosis of HER2-positive breast cancer patients. His work at MSK also earned him a PhD from Universitat Autònoma de Barcelona in 1992.

In 1996, José returned to Vall d’Hebron Hospital with plans to implement the MSK research model, specifically the intermingling of basic science with translationally informed oncology practice. According to someone at that time, he was making a mistake moving from one of the best cancer hospitals in the United States to an unknown public hospital in Spain with no tradition in oncology research. To prove his naysayers wrong, José focused on what would later become a recurring pattern in his leadership: hiring the best people. Many of those he hired and trained went on to leadership roles in the oncology community. José knew that he also needed laboratories for basic and translational research, so he convinced Joaquin Arribas, a senior postdoc from the MSK lab of Joan Massagué, to follow him and help transform an empty 70-m² room in the middle of the oncology practice facilities into a top-notch research center. In just a few years, José put Barcelona and Vall d’Hebron Hospital on the cancer research map, building a bed-to-bench culture that we now call “precision medicine.”

I met José in 2004 at Vall d’Hebron. After 40 minutes in his office, he offered me a job, but in typical fashion gave me only 72 hours to decide and begin work. I accepted in 48 hours but managed to negotiate a more leisurely start date. That decision marked the beginning of a 16-year relationship that would transform my professional and personal life.

In 2010, we moved together to Boston, Massachusetts. José accepted the position of chief of oncology and codirector of the Massachusetts General Hospital (MGH) Cancer Center, and I followed him to build his laboratory. His vision was clear to everyone: a clinical investigation program worthy of the name of one of the world’s best hospitals. Once again, José was not afraid of betting on young horses. Dejan Juric, a director at MGH who was then still in fellowship, became the heir-apparent to the MGH Phase I program. Astounded by José’s drive, energy, and commitment, Dejan said to me at the time, “Mauri, I thought I was ready for anything, but I was not ready for José.”

In January 2013, we again moved together, this time to MSK, where José made sure that in addition to managing his laboratory, I got my own independent group. What José did there in 6 years exceeded all expectations. I was in his office when, after a few days in the job, he made a phone call to someone asking the price for a biopsy (critical for translational work in clinical trials). In his way, he informed whoever was on the call that from that moment, they needed to cut the price in half. He founded and then pushed the Center for Molecular Oncology and the Early Drug Development Service to become the gems of precision medicine they are today. José expanded his vision by hiring physicians and scientists to build MSK-IMPACT, the targeted exome sequencing platform capable of genomically characterizing virtually every patient who walks into the clinic. Meanwhile, he empowered a young oncologist named David Hyman with the mandate and the resources to develop the best Phase 1 unit possible.

In September 2018, José resigned from MSK after it was revealed that he had failed to disclose ties to drug companies. Although José’s scientific achievements were never called into question, this incident highlighted the need for a long-overdue debate about the uniformity and clarity of conflict disclosures in medical and scientific journals.

In what would become his final challenge, José brought his experience and stamina to AstraZeneca to reform oncology R&D in his singular manner. He immediately hired new talented clinicians and researchers to enhance what was already a successful team and built a perfectly oiled machine to test and approve new cancer drugs. José was direct, tough, demanding, and unforgiving, but he was also funny and caring. He would often display many or all of these characteristics in the same day. He hated mediocrity and pushed everyone around him to strive for perfection. Directly or indirectly, José helped the development and approval of a dozen drugs. In doing so, he saved and improved the lives of hundreds of thousands of cancer patients around the world.
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