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Those of us in cancer drug research and development are taking a real beating in the press these days. If only the love for our mission were enough, but the financing does matter. And as passionate a crowd as we are, we have been pummeled for over a year with dismal figures on investment levels and the outlook for oncology-focused biopharmaceutical companies. We've all seen the stories; new oncology investment dollars have all but dried up in favor of current biotech darlings—medical devices, diagnostics, medtech and cleantech as examples—areas with shorter investment windows and lower immediate risk. But does the capital roadblock reflect a lack of innovation in oncology? Or slow the advances being made? My view is solidly “no” - just the opposite. Dollars, though more scarce for startups, continue to find and fund the most promising discoveries. The penchant for risk-taking and innovation that defines the biotech R&D set is more alive and well than ever, especially in the field of oncology.

The salutary upside to the current global financial turmoil is that “me-too” ideas are being passed over for truly novel approaches. With an increase in understanding the heterogeneity of cancer coupled with a detailed understanding of drug mechanism and the recent growth in the development of targeted agents, I'm placing my bets on oncology drugs making the first marks in truly personalized medicines.

In parallel with the continued development of novel medicines and coupled with the need to make research and development dollars go farther, we're undergoing a sea change in the way cancer clinical trials are designed. Gone are the days of drugs being approved on the basis of no real improvement in patient outcome but a better safety profile. Investigational cancer agents now need to deliver meaningful patient benefit to clear FDA hurdles

and then they have to be priced acceptably to clear reimbursement hurdles. Trial designs need to be developed in concert with regulatory authorities and we have to incorporate new statistical models in order to most cost effectively advance the fight against cancer. “Innovation” in oncology today and in the years ahead applies not just to early science and technology platforms, but also to trial design, strategic collaborations, creative financing, and other solutions for reducing overhead and more rapidly advancing product candidates to market.

There are currently far more ongoing clinical trials in oncology than any other disease area. The number of newly diagnosed cancer cases worldwide is expected to grow and exceed 17 million, and the global market for cancer drugs is expected to reach \$80 billion by 2020. Cancer is unfortunately here to stay, and while the passion to blunt its impact on society remains unchecked, there is no doubt that we have to continue to adapt to a changing world in order for innovative drug research and discovery to succeed.

So, despite the economic gloom and doom in the press, my glass remains half full. These times have forced our industry to become more selective, more collaborative and more creative in advancing cancer development programs. We are moving forward under a new presidential administration and U.S. Congress that are increasing funding for biomedical research, including stem cell research; and recognition that the scientific discovery and research engine remains our ongoing foundation for success. If anything, while criticism is in certain cases justified, I believe that it has only increased the speed and the power of the innovation engine.

So as one voice representing the oncology R&D crowd, we advance undeterred in discovering and developing treatments that allow patients to live meaningfully longer and better lives. We continue to gain real ground in moving the needle from cancer as a death sentence to cancer as a chronic, treatable condition. Biotech financing waves may come and go, but the passion to innovate endures.

– Julian Adams, PhD