Blueprint Medicines Secures $50 Million in Series C Financing

-Proceeds to support continued advancement of highly selective kinase inhibitors to genomically defined cancers, including first-in-class FGFR4 and KIT Exon 17 inhibitors-

-Investor syndicate includes leading public healthcare funds-

CAMBRIDGE, Mass. – November 12, 2014 – Blueprint Medicines, a leader in discovering and developing highly selective kinase inhibitors for genomically defined cancers, today announced the completion of a $50 million Series C financing. Proceeds from the financing will be used to advance Blueprint Medicines' two lead product candidates through clinical trials in 2015 and fund the continued development of Blueprint Medicines' kinase discovery platform and pipeline.

"The proceeds from this financing provide us with the financial strength to initiate clinical trials for our FGFR4 and KIT Exon 17 inhibitors in 2015 with the goal of establishing proof of concept rapidly and ultimately improving the lives of patients," said Jeffrey Albers, chief executive officer of Blueprint Medicines. "We are incredibly pleased to welcome such highly respected public investors to our shareholder base. Their investment provides strong endorsement for the quality of the platform, pipeline and team we've built at Blueprint Medicines over the past three years."

Blueprint Medicines' Series C financing was led by Partner Fund Management and included additional new investors, Wellington Management Company, RA Capital, Tavistock Life Sciences, Perceptive Advisors, Sabby Capital, Cowen Investments and Redmile Group. The Company's existing shareholders – Biotechnology Value Fund, Casdin Capital, Fidelity Biosciences, Nextech Invest and Third Rock Ventures - also participated in the financing.

"Blueprint Medicines' proprietary kinase platform, which combines a first-of-its-kind chemical library and a novel genomics-based target discovery engine, holds significant value creation potential," said Alex Virgilio, Ph.D. of Partner Fund Management. "The team has achieved impressive results to date by rapidly discovering and advancing two first-in-class product candidates toward clinical development. We believe the team can sustainably replicate this success based on the strength of the platform in producing exquisitely selective inhibitors to novel genomically defined kinase targets."

Blueprint Medicines expects to initiate clinical trials in 2015 with its two lead product candidates:

- BLU-285 is the first known selective inhibitor of KIT Exon 17 mutants. The Company intends to initiate two clinical studies, including one for the underserved systemic mastocytosis patient population and another for genomically defined subsets of patients with gastrointestinal stromal tumors (GIST).
- BLU-554 is the first known selective FGFR4 inhibitor. Blueprint Medicines anticipates initiating a clinical study for patients suffering from hepatocellular carcinoma with aberrant FGFR4 pathway activation.

About Blueprint Medicines

Blueprint Medicines is a patient-driven oncology company discovering and developing highly selective kinase inhibitors for genomically defined cancers. Led by a management team and advisors with world renowned expertise in cancer genomics, drug discovery and clinical oncology, Blueprint Medicines has developed a platform that combines genomics with a novel small molecule library of kinase inhibitors, enabling Blueprint Medicines to rapidly discover potent and highly selective drugs against clear drivers of diseases. Founded in 2011, Blueprint Medicines is privately held and initially backed by Third Rock Ventures and Fidelity BioSciences. For more information, please visit www.blueprintmedicines.com.

CONTACT:

Investor Relations:
Beth DelGiacco
Stern Investor Relations, Inc.
212-362-1200
beth@sternir.com

Media Relations:
David Polk
Chandler Chicco Companies
310-309-1029
dpolk@chandlerchiccocompanies.com