Exhibit 10.6

## AGREEMENT

The undersigned hereby agrees that, if BG Medicine, Inc. (the "Company") does not complete a financing transaction of at least \$3,000,000 of the type currently contemplated by the Company's Board of Directors (such as an initial public offering, a venture debt financing or other significant equity or debt financing with institutional investors) on or before October 26, 2007, then the undersigned will make available to the Company, immediately upon the Company's request, an amount of cash, up to a maximum of \$3,000,000, sufficient to fund the Company's operations through the period ending on March 31, 2008. Such funding will be made available by each of the undersigned, severally, in the percentages set forth on Exhibit A attached hereto. Any funds actually provided to the Company hereunder will be evidenced by a series of promissory notes which will be repayable on June 30, 2008 and, if not repaid on that date, shall thereafter be immediately evidenced by a series of demand notes for the aggregate amount actually provided to the Company hereunder. Any promissory or demand notes issued by the Company pursuant to this agreement will be on current market terms. Each of the undersigned represents that this is a legally binding and enforceable obligation.

EXECUTED as of this 30th day of September, 2007.

AGTC Advisors Fund, L.P. Applied Genomic Technology Capital Fund, L.P. NewcoGen Equity Investors LLC NewcoGen-Elan LLC NewcoGen-Long Reign Holding LLC NewcoGen-PE LLC ST NewcoGen LLC

On behalf of the above listed Flagship entities /s/ NOUBAR AFEYAN Gilde Europe Food & Agribusiness Fund, B.V. /s/ PIETER VAN DER MEER, PARTNER /s/ STELIOS PAPADOPOULOS Stelios Papadopoulos

## EXHIBIT A

Investor	% of Commitment	Amount
AGTC Advisors Fund, L.P. Applied Genomic Technology Capital Fund, L.P. NewcoGen Equity Investors LLC NewcoGen-Elan LLC NewcoGen-Long Reign Holding LLC NewcoGen-PE LLC ST NewcoGen LLC		
Total Flagship Entities	52.0%	1,560,000
Gilde Europe Food & Agribusiness Fund, B.V.	32.0%	960,000
Stelios Papadopoulos	16.0%	480,000
	100.0%	\$ 3,000,000

QuickLinks

Exhibit 10.6

AGREEMENT EXHIBIT A