

**Summary of Certain
Amgen Patents
Relating to G-CSF**

April 17, 2007

A. General.

US 4,810,643, US 4,999,291 and US 5,830,705: This family of patents includes claims directed to DNA sequences encoding human pluripotent G-CSF; hybridizing DNA; DNA which, but for the degeneracy of the genetic code, would hybridize; DNA encoding a fragment or analog of pluripotent G-CSF; processes for the production of human pluripotent G-CSF; and polypeptide G-CSF products. These U.S. patents expired in March 2006. The counterpart EP patent (**EP 0237545 B2**) expired in August 2006, although a Supplementary Protection Certificate (SPC) was granted in France that will remain in effect until July 2008.

B. Specific Claimed Sequences.

US 5,580,755: This patent includes claims directed at a human pluripotent G-CSF with a specified amino acid sequence (wild type), and analogs thereof wherein one or more cysteine residues located at positions 17, 36, 42, 64 and 74 are replaced by serine. Maxygen's MAXY-G34 differs in amino acid sequence from the claimed sequences and does not contain any of the claimed mutations. This patent expires in December 2013.

US 6,004,548: This patent includes claims essentially identical to US 5,580,755 above, but with claims limited to human G-CSF wherein one or more of the cysteines at positions 17, 36, 42, 64 and 74 are replaced by alanine. MAXY-G34 differs in amino acid sequence from the claimed sequences and does not contain any of the claimed mutations. This patent expired in August 2005.

US 6,379,661: This patent includes claims directed to a pharmaceutical composition comprising a G-CSF polypeptide selected from (a) human wild type G-CSF, optionally with Met at pos. -1, as shown in Fig. 7 (=hG-CSF) and (b) the polypeptide of (a) where cysteine at position 17 is replaced with serine or alanine. This patent expired in August 2005.

C. Pegylated Variants.

US 5,824,778: This patent includes claims directed to a G-CSF polypeptide having at least one PEG molecule covalently attached to at least one amino acid of the polypeptide through a carboxyl group of said amino acid, or G-CSF with a PEG molecule attached to any amino acid, but where the polypeptide has the wild-type sequence. MAXY-G34 does not have PEG molecules attached through a carboxyl group. This patent expires in October 2015. The EP counterpart patent (**EP 0401384 B1**) expires in December 2009.

US 5,824,784: This patent includes claims directed to a substantially homogenous preparation of N-terminally monoPEGylated G-CSF or an analog thereof. MAXY-G34 is not PEGylated only at the N-terminal. This patent expires in October 2015. The EP counterpart patent (**EP 0733067 B1**) expires in February 2015, although Supplementary Protection Certificates have been granted in several European countries, which SPCs expire in August 2017.

US 6,166,183: This patent includes claims related to US 5,824,778, but with claims directed to a G-CSF polypeptide having the natural complement of lysine residues (i.e. those found in naturally occurring human G-CSF) and having at least one PEG molecule covalently attached to at least one amino acid of the polypeptide. MAXY-G34 does not have the natural complement of lysine residues. This patent appears to expire in December 2009 (20 years from the PCT filing date).

D. Method of Preparation.

US 5,581,476 and US 5,790,421: These patents include claims directed to a computer-based method and apparatus for preparing a G-CSF analog by means of computer expression of the three-dimensional structure of G-CSF using its X-ray crystallographic coordinates. MAXY-G34 was not prepared using the X-ray crystallographic coordinates of G-CSF. These patents expire in December 2013 and August 2015, respectively.

E. Methods of Production.

US 4,810,643 and US 5,830,705: These patents claim processes for the production of pluripotent G-CSF. These U.S. patents expired in March 2006.

F. Method of Treatment.

U.S. 5,582,823: This patent is directed to methods of treatment using the same compositions described in U.S. 5,580,755 (see above). This patent expires in December 2013.

Safe Harbor Provision: This summary contains factual and forward-looking statements, including those relating to Maxygen's view as to the interpretation and scope of claims of various Amgen patents; and whether, in any patent infringement litigation or similar legal proceeding, the development or commercialization of MAXY-G34 would be determined to infringe one or more Amgen patents. Such statements involve risks and uncertainties that may cause actual results to differ materially from those set forth above. These risks and uncertainties include, but are not limited to: the inherent uncertainties of patent claim interpretation and the outcome of any patent litigation, and the significant costs and management distraction that Maxygen would incur in the event of any patent litigation brought by Amgen or another third party with respect to MAXY-G34. These and other risk factors are more fully discussed in our Form 10-K for the year ended December 31, 2006, including under the caption "Risk Factors," and in our other periodic SEC reports, all of which are available from Maxygen at www.maxygen.com.