

## Biologic approvals in 2008

Amgen (Thousand Oaks, California), Regeneron (Tarrytown, New York), ViroPharma (Exton, Pennsylvania) and ZymoGenetics (Seattle, Washington) all received US Food and Drug Administration (FDA) approvals last year for novel types of biologics (**Table 1**). For a full list of FDA approvals of drugs from public biotech companies, see **Supplementary Table 1** online.

**Table 1** Selected biologic approvals from public biotech companies in 2008<sup>a</sup>

Company/partner	Product (generic)	Indication
Amgen	Nplate (romiplostim, a 60-kDa peptide with a thrombopoietin receptor (Mpl)-binding domain)	Thrombocytopenia in adults with idiopathic thrombocytopenic purpura
Biogen Idec (Boston)/ Elan (Dublin)	Tysabri (natalizumab)	Moderately to severely active Crohn's disease
Cangene (Winnipeg, Manitoba, Canada)	Accretropin (somatropin)	Growth failure in children with growth hormone deficiency and short stature associated with Turner's syndrome
Genentech (S. San Francisco, California)/Roche (Basel)	Avastin (bevacizumab)	Metastatic breast cancer
Regeneron	Arcalyst (rilonacept, single-chain fusion of the extracellular binding domains of interleukin (IL)-1 receptor I and IL-1 receptor accessory protein coupled to Fc portion of a human IgG)	CIAS1-associated periodic syndrome
ViroPharma	Cinryze (serum-derived complement factor C1-esterase inhibitor)	Prevent angioedema attacks in individuals with hereditary angioedema
ZymoGenetics (Seattle)/ Bayer (Leverkusen, Germany)	Recothrom (recombinant thrombin)	General aid to achieving hemostasis during surgery

<sup>a</sup>As defined by *Nat. Biotechnol.* **26**, 753–762 (2008).

## IN their words



**“If people don't want to buy bonds in General Electric, what's going to make them want to invest in an early-stage biotech company?”**

Randy Scott, chairman of Genomic Health, laments the bleak situation that biotech's face in raising capital

in the current financial climate. (*The Wall Street Journal*, January 11, 2009)

**“Whatever it takes to make friends and influence people—whether it's building a school or handing out Viagra.”**

A CIA operative on how the agency occasionally wins over Afghanistan warlords by offering Pfizer's (New York) impotence drug. (*Washington Post*, December 26, 2008)

**“Practically anything you can put a name on is branded in a doctor's office, short of branding, like a Nascar driver, on the doctor's white coat.”**

Physician Robert Goodman decries pharma's marketing efforts to brand almost everything in the doctor's office. (*The New York Times*, December 30, 2008)

**“It's practically a paradise for conducting clinical trials.”**

A spokesperson for Quintiles, the world's largest contract research organization, on the company's success in enrolling 204 infants for a vaccine study in just three days in India. (*Pharmalot*, December 18, 2008)

**“The senator's worried that something's ghostwritten. I mean, give me a break.”**

Lila Nachtigall, a New York University professor and director of its Women's Wellness Center, on Senator Charles Grassley's enquiry into the role of Wyeth in the writing of a journal article she authored extolling hormone treatment. (*The New York Times*, December 12, 2008)



**“2009 will be a year of anticipation for the venture capital industry as the economic turmoil will engender a fair amount of Darwinian change.”**

National Venture Capital Association President Mark Heesen celebrates the bicentenary of Darwin's birth by suggesting it will

be survival of the fittest in the biotech sector. (NVCA press release, December 18, 2008)