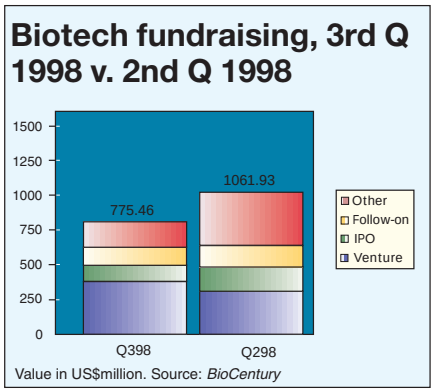

W-L launches nutraceuticals

Jumping onto the nutraceutical bandwagon along with the likes of Novartis (*Nat. Biotechnol.*, **16:**728), Warner-Lambert launched a line of herbal supplements in mid-October. In a recent survey commissioned by Warner-Lambert, 9 out of 10 physicians and 96% of pharmacists reported a dramatic increase in patient and customer interest in herbal supplements compared to five years ago. The line currently has two products: Quanterra Mental Sharpness with Ginko biloba extract (intended to improve acumen), and Quanterra Prostate with saw palmetto extract (intended to reduce the size of the prostate). The products, as standardized extracts, contain 24% flavone glycosides and 6% terpene lactones, and high amounts of fatty acids (beta-sitosterol, campesterol, and stigmasterol), respectively—higher ratios than if whole herbs are ground into powder or extracted with acetone and water. But as with all nutraceuticals, the exact mechanism of how they work is unknown. Warner-Lambert says it will make clinical studies and continuing education courses available to pharmacists.

Giga drug delivery merger

Alza Corp (Palo Alto, CA) has acquired its next-door neighbor, Sequus Pharmaceuticals (Palo Alto, CA) in a deal worth over $0.5 billion. Sequus stock price jumped 40% when the deal was announced. Combining the two drug-delivery companies is intended to strengthen Alza's oncology and urology divisions and will also bring on board Sequus's Doxil treatment for AIDS-related Kaposi's sarcoma, which has estimated sales of $45 million in 1998. According to Anneke Cole, a company spokesperson, Alza has sought a deal like this for several years to establish itself in oncology. However, the timing of the deal is linked to Doxil showing promise in other types of cancer. "Doxil is now in phase III trials for ovarian cancer and phase II/III trials for breast cancer," says Cole. In a stock swap, Sequus shareholders will receive 0.4 shares of Alza stock for each Sequus share they have. Finalization of the deal is expected by early 1999, following Sequus shareholder approval.

First pill for gum disease

The first matrix metalloproteinase inhibitor (MMPI) drug to be approved by the US Food and Drug Administration is also the first drug to be approved for gum disease. CollaGenex Pharmaceuticals' (Newtown, PA) Periostat, which received FDA approval at the beginning of October, is based on doxycycline hyclate, an MMPI found to inhibit the production of two out of three types of collagenase. According to Robert Ashley, vice president of corporate development at CollaGenex, overproduction of the three collagenases—MMP1, MMP8, and MMP13—leads to the breakdown of collagen and bone around the teeth, causing periodontitis. Periostat was found to suppress MMP8 and MMP13, the two collagenases with elevated levels in diseased patients. Periostat, which has showed no more side effects than placebo in phase III trials, is taken in pill form and will be available in the US from mid-November.

Research collaborations

Company 1	Company 2	$ Millons	Details
Zeneca (London)	John Innes Centre & Sainsbury Laboratory (Norwich, UK)	82.5	A 10-year wheat genetics research program to explore advanced genomic techniques and develop improved strains. Zeneca will supply the money and a new laboratory at the John Innes Center for 30 Zeneca scientists. The centre will supply its expertise in plant genomics.
Agouron Pharmaceuticals (San Diego, CA)	Immune Response (Carlsbad, CA)	77	A collaboration to develop and sell Remune, Immune Response's vaccine to help treat HIV patients. Agouron will put forward $77 million over two years for research, and the companies will share the profits from Remune sales on a 50/50 basis. Agouron gets worldwide exclusive rights to market the drug.
Eli Lilly (Indianapolis, IN)	ICOS (Bothell, WA)	75	A 50/50 joint venture aims to develop ICOS's phosphodiestrerase type 5 inhibitors as oral therapeutics to treat sexual dysfunction. ICOS receives upfront payments and milestones. Lilly gets an exclusive license to the product outside of North America and Europe.
Schering (Berlin, Germany)	Myriad Genetics (Salt Lake City, UT)	51	A five-year collaboration in which Schering will pay up to $51 million for access to Myriad's human protein and functionality database for drug discovery. Both firms have an option to copromote and profit-share resultant products in North America.
Bristol-Myers Squibb (Princeton, NJ)	Molecumetics (Seattle, WA)	45	A three-year alliance to develop drugs for inflammatory and immunological diseases. In exchange for research funds, milestones, and royalties, Molecumetics will identify small molecule transcription factor inhibitors for BMS and supply 150,000 compounds for screening.
Genzyme General (Cambridge, MA)	Pharming Group (Leiden, The Netherlands)	14	A joint venture to develop and globally commercialize alpha-glucosidase produced in transgenic rabbit's milk for the treatment of Pompe's disease, a lysosomal storage disorder. Genzyme will provide Pharming with funding to continue developing the product, which is due to enter a phase II/III trial before 1999.
Millennium BioTherapeutics (Cambridge, MA)	Abgenix (Fremont, CA)	*	An agreement to use Abgenix's technology to develop human antibodies to an undisclosed antigen target linked to inflammatory disease. Abgenix will receive research payments, additional fees, milestones and royalties on product sales. Millennium will also be responsible for manufacturing and marketing resultant products.

*Financial details not disclosed.