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## The Hunt for an Autism Drug

Armed with fresh medical insights, drug companies are redoubling their efforts to address the disease's complex causes

The Weakley family lives in Dover, Pa., about 30 miles south of Harrisburg. Their two-story house sits on a mostly treeless tract of land, across the road from a big white barn. Seated at the dining table, Beverly Morgart-Weakley is describing the recent changes she's seen in her 21-year-old daughter Jennifer. Once unable to form words, "she keeps saying 'mama', and she's starting to say the beginnings of other words. You'll hear something that almost sounds like a sentence and you can figure out what she's trying to tell you."

Every parent looks forward to these developmental milestones, but Beverly has been waiting two decades. In the early 1990s, Jennifer was diagnosed with autism, and her early childhood was dominated by doctor's visits. Things got worse in her teens. The girl would sometimes bite her own arms in paroxysms of frustration. Many times she grabbed her mother or her younger sister by the neck and squeezed hard. Even the family's collie was bitten.

Beverly was skeptical of medications, but she needed a way to quell her daughter's increasingly violent outbursts. Doctors tried the antipsychotic drug Risperdal, but Jennifer gained weight and grew sluggish. Then they turned to Zyprexa, a schizophrenia medication, but the symptoms persisted. Over the past year the family has had a modest breakthrough with Namenda, an Alzheimer's drug from Forest Laboratories ([FRX](#)). Jen's aggression has subsided and her communication skills have improved. "She is still far from normal," says Beverly, looking on as her daughter repeatedly opens and closes the refrigerator, then settles on the floor in the den and methodically removes every item from a filing cabinet. "But she's made progress, and that in itself is a miracle."

### EVOLVING SCIENCE

Encouraged by even partial success stories like the Weakleys', the drug industry is gearing up for an assault on autism. The timing makes good sense for both scientific and economic reasons. Powerful genetic tools and brain-imaging techniques have given researchers fresh insights about the disorder, often described as a "spectrum" because symptoms vary greatly in nature and severity. In the past year scientists at several small biotech companies have voiced excitement over new drugs in early-stage clinical trials. Last year, industry giant Pfizer ([PFE](#)) formed a 14-person autism research group at its Groton (Conn.) laboratories. "The science has evolved to the point where we can now start investing in potential pathways and targets," says Anabella Villalobos, Pfizer's vice-president for neuroscience chemistry.

From a drug-industry standpoint, the demographics of the disease are also compelling. Diagnoses among children jumped 57% from 2002 to 2006, according to the Centers for Disease Control & Prevention in Atlanta. Roughly 1 in 110 8-year-olds in the U.S. is on the autism spectrum. Just as interesting to drugmakers is the fast-growing population of adult autistics who can't be helped by the kind of intensive behavioral therapy that sometimes works on children, because their brains lack the same plasticity. One decade from now there will be seven times as many autistics entering the adult-services sector as there are today. The disorder already costs