# Video/Audio 1

AIDs drugs

**Directions:** Watch the video clip twice and write out a complete summary of the news item based on the prompts given. 1. Main topic of this news item 2. Gary Saddler's medical history 3. Saddler's current condition 4. Traditional for treatment patients like Saddler 5. The Problem of traditional treatment 6. Latest development in

# Script

#### **New AIDS Drugs**

**Jennifer Matthews:** Gary Saddler took time off from his high-paying, high stress job in banking to work full-time educating others about AIDS and HIV infection. Thirteen years ago, Gary tested positive.

**Gary Saddler:** At that time, it was a true death sentence because the medications were not as effective as they are today.

**Jennifer Matthews:** In 1996, patients began using a combination of anti-retroviral drugs, designed to keep the disease at bay. There are more than 20 AIDS drugs available in four separate classes, meaning the drugs work in one of four different ways. But for thousands of patients, HIV treatment is failing because the virus has developed resistance to those drugs.

**Gary Saddler:** And oftentimes, the virus can develop resistance to one drug and it confers cross-resistance to all other drugs within that group.

Jennifer Matthews: That's why experts say new options are crucial. They're hailing the development of two new drugs, each of which represents a new class of HIV drugs. Isentress is the first in a new class of drugs called integrase inhibitors. Taken twice a day, Isentress is designed to work by blocking an enzyme that allows HIV to insert viral DNA into the DNA of a person's immune cell. Another drug, Selzentry, blocks a protein on the immune system cells that HIV sometimes uses as an entryway. Experts say one drug or the other would be taken in combination with existing AIDS drugs. Gary Saddler is healthy now. But if his current cocktail ever starts to fail him.

Gary Saddler: There is always the possibility that the disease can start moving forward.

**Jennifer Matthews:** He says it's good to know there are other drugs on the horizon. This is Jennifer Matthews reporting.

## Video/Audio 2

**Question:** What is Alzheimer's disease?

Dr. Bill Simpson: Well, Alzheimer's disease was defined back at the turn of the century, at the turn of the 20th century by Alois Alzheimer, who gave his name to the disease when he talked about a woman who developed premature dementia, loss of previously acquired minimal functions of not able to think as well as she had been before. She was in her forties, and that's very unusual. But his description of the woman and of the pathology in her brain was what gave the disease its name. And the pathology in the brain is what they call neurofibrillary tangles and plaques. Those are just anatomical findings that the pathologist can see in the brain and people that have Alzheimer's, they have lots of those abnormal spots. It looks like a person who can't remember as well as they want or are able to. And the earliest sign is the difficulty with executive things, planning things, planning a party, planning a menu, balancing a checkbook, doing a budget. Those things are among the first things that are difficult to do in a patient with Alzheimer's. Then it progresses. It's a progressive disease and essentially moves from normal function to back to almost infant like, unable to speak or talk or move. But it's a very long process, usually a process of 5 to 10 to 15 years from the first symptoms to the last symptoms.

Question: What are the symptoms of Alzheimer's disease?

**Dr. Bill Simpson:** Well, those early ones are the executive functions, decision making. They move then to more simple things we think of that we do without even thinking, that is, choosing a wardrobe, choosing the clothes that we wear, being able to complete a recipe. And then to difficulty with eating and to toileting and to dressing and bathing, all those things become more and more difficult for the patient with Alzheimer's disease as it progresses. Then finally, unable to dress themselves or to get around on their own, they lie on bed. The thing that kills Alzheimer's patients is primarily pneumonia. They just don't get up and move around enough and they become bedridden and they have some disease that results from being in bed all the time.

**Question:** What are the risk factors for Alzheimer's disease?

**Dr. Bill Simpson:** Age is the most significant risk factor where having people live longer. Live the greater, the likely that we might develop Alzheimer's disease. Other risk factors; people that have had multiple blows to the head seemed to have an increased risk for Alzheimer's disease. People that have lower levels of educational achievement tend to have a higher risk of Alzheimer's disease. However, it crosses all sections of the society but those are some of the few of the multiple risk factors that are out there. There are a few strong genetic risk factors, that is, they are strong in some families that have high levels of Alzheimer's disease in them. We don't really understand exactly why it is probably a genetic thing. We know that there are genes that control Alzheimer's disease and if you have a double dose of those genes, then

you may have a higher risk of Alzheimer's disease developing in the future. But most of the time, we don't know why Alzheimer's develops, at least so far, there is a great deal of research trying to find these part in the brain, and the gene's code that makes us have Alzheimer's disease risk increase or some other biochemical abnormality that makes those neurofibrillary tangles and plaques develop in our brains.

## Video/Audio 3

Thanks to a cochlear implant, 10-year-old Sammie Hicks can hear again. CNN has the emotional moment...

"Watch Sammie jump when the audiologist activates the implant. Then the first thing she hears... herself -- breathing."

Hicks was born with a genetic mutation and had limited hearing. She lost her hearing completely at the age of two.

After the family's insurance company agreed to pay for the implant, Jenifer Hicks, Sammie's mom, began a video blog to document her daughter's struggles, post-surgery. Here's their conversation a mere four hours afterwards...

"How do you feel now?"

"Well it hurts, but it doesn't hurt as much as I thought it would be."

"What does your head feel like?"

"Heavy."

The implant works like much like a "bionic ear". Once it is surgically implanted under the skin, it is turned on three weeks later. Hicks' physician, Dr. Paul Baurer explains to ABC News...

"Inside of your inner ear are millions of microscopic hairs that turn the nerves on and off in very simple form. And what a cochlear implant is trying to do is replacing those hairs."

According to Australia's NineMSN, the implant works differently than a standard hearing aid. While hearing aids simply amplify sounds, the implant bypasses the damaged tissue and stimulates the auditory nerves directly. It does what Hicks' ears cannot do naturally.

While the \$27,000 implant is a miracle in itself, it isn't perfect. Hicks says all the voices she hears sound like robots. Sammie is adjusting well as is her 9-year-old brother Jacob, who had an implant operation after she did. His implant will be turned on June 7.