which included only a small number of patients, was not designed to assess the clinical impact of viral resistance to AZT but simply to ask whether such resistance was developing. "We've answered that question," he remarks, "but the wider question will require a lot more study."

The emergence of the AZT-resistant strains of the AIDS virus comes as no surprise. Cancer cells often develop resistance to the drugs used for cancer chemotherapy, just as bacteria become resistant to antibiotics such as penicillin. "When you treat a microorganism with the ability to mutate, you select out resistant variants. The AIDS virus mutates very readily," Fauci notes. At least two additional groups have presented data at AIDS meetings that indicate that HIV-1 becomes resistant to AZT in patients taking the drug.

To combat the development of resistance, combinations of drugs with different modes of action are frequently used in cancer chemotherapy. "We wouldn't rely on any one drug. The odds of developing resistance to a combination are much stiffer," says Samuel Broder, director of the National Cancer Institute and one of the clinicians who helped develop AZT for AIDS therapy.

Combination drug therapies for AIDS are under investigation. One of the more optimistic findings by Larder and his colleagues is that the AZT-resistant virus strains retain their sensitivity to three other drugs that are being tested in AIDS patients.

New AIDS drugs are needed, and not just because AZT therapy is, for whatever reason, only of temporary benefit for many of the patients who receive it. Some 50% of the AIDS population either cannot take AZT at all or must take reduced doses because the individuals cannot tolerate the drug's side effects, such as depression of blood cell formation by the bone marrow.

At the behest of British health officials, the Burroughs-Wellcome Co. sent a letter on 13 March to the physicians who prescribe AZT to alert them of the new findings about the emergence of drug-resistant strains of the AIDS virus. On 14 March, the company issued a press release that gave a brief summary of the resistance study results and also notified the London Stock Exchange, where its stock is traded, about the results. This notification is required of any company that expects a large change, whether a decline or increase, in the price of its stock.

Because company officials thought that they were morally and legally obligated to take these steps, *Science* did not oppose the early release of the information, even though it violated the journal's normal embargo policy. ■ JEAN L. MARX

Treasuring the Moon for 20 Years

As the 20th anniversary of the first landing on the moon approaches this July, 98% of the moon rocks collected by Apollo astronauts await further study in the continuing effort to unravel the origin and evolution of Earth's nearest neighbor. Not that the 382-kilogram treasure trove of lunar samples has been gathering dust in the Planetary Materials Laboratory at the Johnson Space Center in Houston. It is just that lunar scientists are being parsimonious in the extreme.

Researchers have subdivided the original 2,196 numbered samples into about 70,000 pieces, each numbered and documented. About 56,000 subsamples of these have gone out for analysis, but thanks to the care of sample preparers, the nondestructive nature of many tests, and the sensitivity of modern analytical techniques, only 2% of the moon rocks have been consumed. From that tiny investment, researchers have learned that the moon is as old as Earth and the meteorites, that it formed under dry, reducing conditions, that it once had a magnetic field, that it became layered early on, that a heavy bombardment by meteorites ended about 3.9 billion years ago, and that it has a dearth of iron-loving elements, among other insights. The moon rocks have not yet yielded all the answers; one lingering question is why there is a moon at all (*Science*, 17 March, p. 1433).

There seems little doubt that the moon rocks will be ready for the next 20 years of study. They are being kept under pure, dry nitrogen in a vault with walls of 45 centimeters of double-rebarred concrete and 6 millimeters of steel. The best safecracker would take 7 hours to open the vault's door. The vault is one-and-a-half stories above the ground and thus above the highest storm surge expected from the Gulf during 100 years. About 14% of the stash is actually in a vault in San Antonio to avoid having all the eggs in one basket.

If recent experience is any guide, the coming years of research on the moon rocks could be relatively quiet. About 700 to 900 samples, most of them only milligrams in size, are going out each year to the 65 or so investigator groups active in the field, 15 of which are outside the United States. But that is a far cry from the heady days of the early 1970s during the Apollo missions. Even the recent rejuvenation of lunar origin studies has not noticeably increased the steady rate prevailing since the late 1970s, according to Douglas Blanchard of the laboratory.

There are some signs of renewed activity. The same techniques developed for storing, handling, and sampling the moon rocks are being applied at the laboratory to the meteorites collected from the Antarctic ice, a few of which were blasted off the moon and perhaps Mars, and to interplanetary dust collected in the stratosphere. And there is the perennial hope that a satellite orbiting over the moon's poles could extend the results from local Apollo sampling to the whole moon. ■ RICHARD A. KERR

A part of the treasure. *These moon rocks were part of the first load returned by Apollo astronauts. This July will mark their 20th anniversary on Earth.*