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in the repository, says H. Ballentine Carter, MD, director of Adult Urology at Johns Hopkins. Prostatectomy tissue is collected from participants who decide to have surgery.

Investigators will analyze the samples and correlate their findings with the clinical data. Such work might lead to the discovery of genetic signatures of aggressive disease, for example, or allow researchers to examine the activity of circulating tumor cells at different disease stages.

Since 1995, Johns Hopkins urologists and oncologists have gathered clinical data on more than 1,000 patients pursuing proactive surveillance for prostate cancer, the largest prospective cohort in the country, notes Carter. Many of those patients will enroll in NPSN. Holden says the Cedars-Sinai team aims to further enrich the data by enrolling about 100 more patients annually.

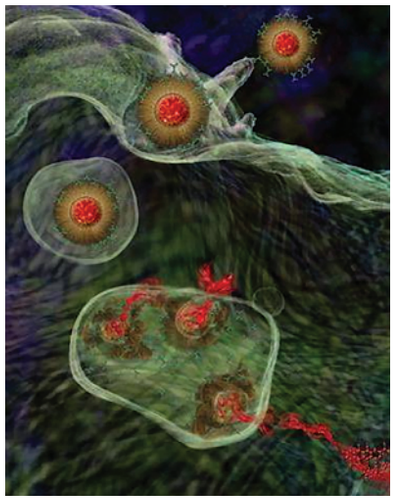
"If we can figure out who has disease that really needs to be treated," he adds, "we will have solved a huge problem." ■

"Minicells" Safely Deliver Targeted Drugs

A new form of targeted drug delivery via "minicells" proved generally tolerable in its first trial in humans. The minicells are derived from mutated bacteria that divide at the poles, producing a nonliving sphere with no nucleus that can be loaded with chemotherapeutic drugs and coated with antibodies that target specific tumor cells.

The 400-nm-wide spheres are large enough to be contained by normal blood vessels but small enough to slip out of the leaky vessels found inside tumors, says Benjamin Solomon, MBBS, PhD, the trial's principal investigator and a medical oncologist at the Peter MacCallum Cancer Centre in Melbourne, Australia. Once inside the tumor, targeted antibodies bind to receptors on the tumor cell. When the minicell is ingested by the tumor cell, it breaks down and the drug is released.

Twenty-eight patients with end-stage solid tumors participated in the phase I multicenter trial, reported on November 9 at the 2012 Symposium on Molecular Targets and Cancer Therapeutics, hosted in Dublin by the European Organisation for Research and Treatment of Cancer, the National Cancer Institute, and the American Association for Cancer Research.



"Minicells" derived from mutated bacteria are nonliving spheres that can be loaded with chemotherapeutic drugs and coated with antibodies that target specific tumor cells.

The patients received 5 weekly infusions of minicells filled with paclitaxel and coated with antibodies targeting the epidermal growth factor receptor (EGFR) protein found on the surface of many tumor cells.

Ten of the patients showed stable disease after 6 weeks, and some continued on minicell therapy for months, with 1 patient receiving 45 doses in 15 months. Side effects included short-lived fevers and, in some cases, chills, typically an hour after dosing. At the highest dose, some patients showed signs of liver function changes.

Minicell developers Himanshu Brahmbhatt, PhD, and Jennifer MacDiarmid, PhD, of EnGeneIC, in Sydney, Australia, hope to reduce side effects by minimizing the presence of endotoxins in the minicell membranes.

The team plans a phase I/II trial to test minicells in patients with gliomas, again targeting EGFR but delivering doxorubicin. Dogs with brain cancer showed promising results with this treatment, notes Solomon.

"The success of the phase I trial allows us to begin to look at efficacy," says Solomon. "But the real potential is packaging drugs that are impossible to give systemically." For instance, the team is exploring the possibility of using minicells to deliver siRNA to silence drug-resistant genes. ■

NOTED

- Harold Varmus, MD, director of the National Cancer Institute (NCI), said that the **NCI will expand its "zone of likelihood" for applications for grant funding from those scoring in the seventh percentile and better to the ninth percentile and better for fiscal year 2013.** Grants scoring below the ninth percentile can be funded after an additional review. NCI aims to support about 1,100 new grants in FY 2013, which is in line with previous years.
- **India plans to build a National Cancer Institute facility that will be the nation's largest cancer center** at an All India Institute of Medical Sciences campus outside New Delhi.
- **Sanofi cut the price of Zaltrap (ziv-aflibercept) in half after criticism of the drug's cost-effectiveness** in *The New York Times* by 3 Memorial Sloan-Kettering Cancer Center physicians. The move "represents a success in moving toward value-based systems of care," commented Debra Patt, MD, MPH, in *Community Oncology*.
- **The U.S. Food and Drug Administration granted priority review for marketing approval of trastuzumab emtansine** (T-DM1; Genentech) in the treatment of people with HER2-positive, unresectable locally advanced or metastatic breast cancer who have received prior treatment with trastuzumab (Herceptin; Genentech) and a taxane chemotherapy.
- **The NCI gave the University of Michigan Comprehensive Cancer Center a $28.4-million, 5-year grant** and renewed its designation as a Comprehensive Cancer Center. The University said that it has received the most NCI funding among U.S. academic medical centers, with the Cancer Center receiving a total of $79 million in 2011. After submitting a 1,937-page grant renewal to the NCI, the Cancer Center underwent a 2-day site visit by reviewers in fall 2011.
- Beginning as early as spring 2013, **the NIH "will begin to hold processing of non-competing continuation awards if publications arising from grant awards are not in compliance with the public access policy,"** wrote Sally Rockey, PhD, deputy director for extramural research, in an entry on her blog.

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AACR American Association for Cancer Research

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