Advances increase treatment options

By Alison Bailin Batz

More than 4,000 women in Arizona will be diagnosed with breast cancer this year. And with technology making strides every day, there are ever-increasing numbers of treatment options.

Scottsdale radiation oncologist Dr. Robert Kuske said there still are three main categories into which all of the many treatment options fall: surgery, drug therapy and radiation therapy.

Different types of operations may be used for breast cancer. A given patient will have some but not all of these surgeries.

Lumpectomy: Removal of the cancerous lump only, also known as partial mastectomy.

Mastectomy: Complete breast removal. Sentinel lymph node surgery or axillary dissection: Removal of one or more lymph nodes from the armpit area.

Breast reconstruction: Plastic surgery to re-create a breast after mastectomy.

Drug therapy is the blanket term for drugs used to eliminate cancer from the body. Drugs travel throughout the body and eliminate cancer that cannot be seen or removed by surgery and radiation. Among the most common drug therapies are:

Estrogen-blocking drugs, which can be effective against breast cancers stimulated by estrogen, a female hormone. Most are taken as a pill.

Chemotherapy drugs, many of which are synthetic versions of plant and animal

toxins. Chemotherapy is given for several months, and the drugs may be given by vein or in pill form.

Targeted or biologic therapy, which attack specific proteins present in some breast cancers. These drugs may be given with chemotherapy or as stand-alone treatment.

Radiation therapy is a type of focused energy. Radiation therapy is useful because cancers are much more vulnerable to radiation than healthy tissues.

Kuske, who was one of the first doctors to note the potential for harming the heart when treating left breast cancers, and one of the first to implement methods to minimize risk, said radiation is safest when given in many small treatments over one or more weeks.

Today, many women are able to choose radiation because the survival rate for such treatment is the same as with mastectomy for select early stage breast cancers and it allows the patient to preserve her breast.

"External beam radiation therapy, the common treatment today for early-stage breast cancer, is safe and very effective," Kuske said. "But, it can take six time/energy-consuming weeks of daily treatment with side effects."

So Kuske and his team did something about it.

While serving as chairman of radiation oncology at the famed Ochsner Clinic in New Orleans, Kuske and colleagues found

that, in many cases, less than the whole breast needed radiation. Based on this research, Kuske pioneered Accelerated Partial Breast Irradiation (APBI), a fiveday radiation therapy alternative for women with early stage breast cancer.

As his research progressed, Kuske found almost all of his cancer patients were strictly those with breast cancer. So, when he moved to Scottsdale in the mid-2000s, Kuske partnered with fellow Scottsdale breast cancer innovator Dr. Coral Quiet and founded Arizona Breast Cancer Specialists, the first center worldwide dedicated to exclusively treating women with breast cancer with radiation.

With his focus strictly on treating breast cancer, he has been more determined than ever to move his APBI research into the mainstream. As such, in our own Arcadia backyard, today he is co-principal investigator in the largest breast cancer radiation trial in medical history. His trial, sponsored by the National Cancer Institute, is testing 4,300 women with head-to-head, six-week whole breast radiation versus his five-day APBI.

"I am within months of finishing the trial, and believe the results will cause the biggest paradigm shift in how patients will be treated since Marie Curie herself discovered radium in 1896, which led to radiation treatment," Kuske said.

For more information go online: BreastMD.com.