

Understanding Targeted Therapy in Kidney Cancer

Treatments for cancer can seem complicated, and it's not unusual to feel a bit overwhelmed by the information and terminology used. The following analogy may help you understand the treatment options your oncologist has discussed with you and your family.

1. A tumor is a collection of cancer cells, like a house.



2. Tumors and cancer cells need power to grow and multiply. This is similar to your house. Things like the TV need power to work. The electrical wires in your house are similar to “signaling pathways” that bring oxygen and nutrition (power) to cancer cells so they can grow and metastasize (spread).

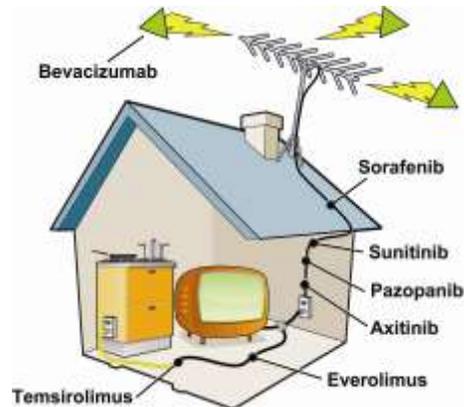


3. Several drugs have been approved by the Food and Drug Administration (FDA) for the treatment of individuals with kidney cancer based on the results of clinical trials. The results of these clinical trials demonstrated that these drugs are

safe and effective in treating kidney cancer. How well a particular drug will work, and what side effects you may experience varies.

Generic Name	Trade Name	FDA Approval
Aldesleukin	Interleukin - 2	1992
Sorafenib	Nexavar	2005
Sunitinib	Sutent	2006
Temsirolimus	Torisel	2007
Everolimus	Afinitor	2009
Bevacizumab with Interferon alfa	Avastin with Interferon	2009
Pazopanib	Votrient	2009
Axitinib	Inlyta	2012

4. These drugs “target” the signaling pathways that are important in kidney cancer, and “inhibit” (block) the power that cancer cells need to grow and metastasize.



Some drugs may be more effective than others, and unfortunately, these drugs will not work for all patients. Side effects will be different for each person, and may be severe for some patients.

Determining the right drug treatment and appropriate dose involves a team approach, so communication with your oncologist and oncology nurse is crucial to treating your cancer and making your treatment tolerable. It's very important to let your oncologist and oncology nurse know what side effects you are experiencing so they can make recommendations to decrease the side effects.