






FIGURE 10

## Phases of Clinical Trials

Clinical trials evaluating potential new therapeutics for treating patients with cancer have traditionally been done in three successive phases, each with an increasing number of patients. Phase I studies are designed to determine the optimal dose of an investigational anticancer therapeutic, how humans process it, and its potential toxicities. Phase II studies are designed to determine the initial efficacy of an investigational therapy, in addition to continually monitoring for potential toxicities. Phase III studies are large trials designed to determine therapeutic efficacy as compared with standard of care. When successful, the results of these phase III trials can be used by the U.S. Food and Drug Administration (FDA) to approve new therapeutics or new indications for existing therapeutics. Phase IV studies are conducted after a therapy is provisionally approved by the FDA and provide additional effectiveness or “real-world” data on the therapy.

| PHASE I   | PHASE II   | PHASE III  | PHASE IV   |
|---|--|--|--|
|  <p><b>Safety and dosage</b></p> |  <p><b>Safety and efficacy</b></p>  |  <p><b>Therapeutic efficacy compared to standard of care</b></p> |  <p><b>Postmarketing studies providing effectiveness or “real-world” data</b></p> |
|  <p><b>Tens of patients</b></p>  |  <p><b>Hundreds of patients</b></p> |  <p><b>Thousands of patients</b></p>                             |  <p><b>Thousands of patients</b></p>  |