Protocol Design and Development Checklist

- **General Protocol Questions**
  - Does the protocol provide appropriate objectives and rationale?
  - Does the study have scientific merit/clinical relevance? Is it a novel approach to treating a disease?
  - Is the protocol ethical? Will the IRB have patient safety/ethics issues with it?
  - Is the protocol in final form? Are all amendments included?
  - Will the subjects benefit clinically from participating in the study?
  - Are the endpoints appropriate for this study?
  - Are there competing protocols?
  - Are staging criteria clearly identified in those cases where staging is used?
  - Does this study require a data safety monitoring (DSM) board? A DSM plan?
  - Is the study unusually long in duration, i.e., could this impact drop-out rate?

- **Study Population Questions**
  - Do you have access to the study population as proposed?
  - Are inclusion/exclusion criteria overly restrictive?
  - Consider the likely screen failure ratio. Will sponsor pay for screen failures?
  - Is the proposed enrollment goal realistic?
  - Is the proposed enrollment period realistic?
  - Will you need to recruit patients from external sources? If so, will sponsor provide funding?
  - Are vulnerable populations involved, e.g., children or impaired adults with special consent issues?

- **Ancillary Support (Pharmacy/Nursing/Laboratory/Radiology)**
  - Does the protocol contain sufficient information regarding drug preparation and storage?
  - Is the drug information regarding side effects and adverse effects clearly stated?
  - Are drug or device storage/accountability requirements complicated?
  - Will the drug be available for patients at the end of the study?
  - Will coordination with other departments/services be required for study visits or procedures?
  - Are procedures frequent; difficult; painful; inconvenient?
  - Is the dosing schedule complex?
  - Are qualified staff available?
  - What are the inservice requirements?
Is the workload realistic?
How many study visits will be required by the sponsor?
Who is expected to attend the Investigator’s meeting?

• Biostatistics
  Are the protocol objectives clearly and precisely stated?
  Are the endpoints clearly and precisely stated?
  Is a literature review or appropriate background information included?
  Is the subject population clearly defined, including inclusion and exclusion criteria?
  Are the criteria for evaluation and/or definition of endpoints clearly and precisely stated?
  Does the protocol include a description of the statistical analysis plan?
  Does the protocol include a clear description of the management and reporting of toxicities?
  For studies that are dose escalating and/or include maximal tolerated doses, are these clearly defined?
  When appropriate, are the early stopping rules clearly defined?
  When appropriate, are the descriptions of randomized methods, stratification, blinding clearly defined?

• Budget
  Does sponsor’s preliminary budget appear adequate?
  If sponsor contracts to pay for "evaluable" subjects, is the definition of an evaluable subject clear and acceptable?
    If the study is canceled prior to enrollment, will the sponsor pay for pre-study activities, e.g.,
    IRB submission, meetings, chart reviews?
  Will sponsor pay for events that are difficult to budget in advance, such as:
    • Protocol amendments requiring consent form revisions?
    • Reconsenting subjects?
    • Unanticipated monitoring visits?
    • Audits?
    • Unexpectedly high number of SAEs?
  Will sponsor pay for an adequate number of screen failures?
  If necessary to store study records off-site, will sponsor provide support?

• Data Management
  Are records storage facilities available? What are storage requirements?
  Will electronic or remote data retrieval systems be used? If so, will sponsor provide training?
  Are the case report forms (CRFs) complex? Multiple CRFs per subject?