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Primary articles are original research articles that present new data, findings, or results from experiments or studies conducted by the authors. They typically include sections like introduction, methods, results, discussion, and references. Plus, primary articles are usually peer-reviewed.

Secondary articles on the other hand, are review articles or analyses that summarize, interpret, or synthesize information from primary sources. Instead of presenting new data, they focus on evaluating and discussing existing research.

The scientific peer review process is a crucial step in validating and improving the quality of research before it is published in academic journals. It involves independent experts in the same field critically evaluating a submitted manuscript to ensure that it meets the standards of scientific rigor, accuracy, originality, and relevance before it is published in a scholarly journal. The scientific peer review process begins when the author submits a draft article to a journal, detailing their research and findings. The journal's editor first determines if the article fits the journal's scope and then sends it to experts in the field for evaluation. These reviewers, who are the author's peers, assess the article's quality and significance, providing feedback on whether it should be published, revised, or rejected. Even if accepted, revisions are typically requested, with the final decision resting with the editor.

The first document, "Base editing of hematopoietic stem cells rescues sickle cell disease in mice," is a primary research article. It presents original research findings, specifically detailing experimental work where a custom adenine base editor was used to correct the sickle cell allele

in mice and assess the physiological effects, including data from laboratory experiments such as transplantation into immunodeficient mice. This level of detail in describing experiments and data collection is characteristic of primary research.

The second document, “Hematopoietic Stem Cell Gene-Addition/Editing Therapy in Sickle Cell Disease,” is a review article. It synthesizes and discusses the current state of knowledge about various gene therapy strategies for treating sickle cell disease, such as gene addition and gene editing, without presenting new experimental data.