From a question to the corresponding answer(s), a question answering system mostly consists of three main processing phases involving the processing of the question, document processing that includes retrieval and selection of relevant documents, which could potentially answer the question and answer processing including answer matching, ranking and selection ([1](javascript:;)).

DATASET:

as Wikipedia, they often have difficulty in understanding biomedical questions. In this paper, we investigate the performance of BioBERT, a pre-trained biomedical language model, in answering biomedical questions including factoid, list, and yes/no type questions. BioBERT uses almost the same structure across various question types and achieved the best performance in the 7th BioASQ Challenge (Task 7b, Phase B). BioBERT pre-trained on SQuAD or SQuAD 2.0 easily outperformed previous state-of-theart models. BioBERT obtains th

BioASQ, an EU-funded biomedical semantic indexing and question answering challenge ([2](javascript:;)) provides accumulated sets of biomedical question/gold standard answer data each year since the inception of the challenge in 2013. BioASQ datasets are cumulative. Every year, the test questions together with gold standard of the previous year are added to the QA corpus. BioASQ covers a large set of biomedicine subdomains including medicine/clinical questions (such as “Describe the mechanism of action of drisapersen” or “What memory problems are reported in the ‘Gulf war syndrome'?”), molecular biology and biochemistry (such as “Which SWI/SNF protein complex subunit has been demonstrated to interact with the FANCA gene product?”) and bioinformatics (such as “Which is the execution time (complexity) of the Smith-Waterman algorithm for the alignment of two sequences”). Four types of questions are provided by BioASQ; (1) “Yes/No” questions such as “Is miR-21 related to carcinogenesis?”, (2) Single factoid questions such as “which is the most common disease attributed to the malfunction or absence of primary cilia?”, (3) list factoid question such as “which human genes are more commonly related to craniosynostosis?” and (4) summary questions such as “what is the mechanism of action of abiraterone?.” We obtained the BioASQ 2017 Task 5b question answering training/development dataset for our system development and evaluation. For all the four types of questions, we have selected a sentence as our answer representation. All yes/no question answers in the BioASQ dataset were implicit in the PubMed abstract sentences. Most summary questions can be answered by a single sentence. A sentence provides the context around the factoid/list answer to interpret the validity of the answer.