**Reviewer #1 (Comments for the Author (Required)):**

**Comment 1**: This manuscript analyzes the NHANES database to estimate the ASCVD risk of adults with diabetes, chronic kidney disease, or age over 65 but restricted to Stage 1 HTN. Among patients with stage 1 hypertension and no DM, or CKD, or age < 65 years the ASCVD risk was low. The implications are that among those with stage 1 HTN, diabetes, CKD, and age are more principal drivers of ASCVD risk. In general, the conclusions are supported by the data.

**Response:** I don’t think the reviewer completely understood the implications or the scope of the paper.

**Comment 2**: Change title to: "Predicted cardiovascular risk for US adults with diabetes, chronic kidney disease, and greater than or equal to 65 years of age and Stage I Hypertension".

**Response**: No – the analysis was overall and among those with Stage 1 HTN  
  
**Comment 3**: Delete Table 2 and move to supplemental tables since no analyses are done outside of stage 1 HTN.

**Response:** No - this is not true.

**Comment 4**: Figures 1 and 2 description please indicate that these are patients with Stage 1 HTN.

**Response:** No - this is not true

**Comment 5**: Delete Supplemental Figures S2 and S3 since analyses outside of the Stage 1 HTN are not featured. This reviewer suggests a future paper with a more complex analytic approach that demonstrates the dynamic relationship of ACVD risk extending through all the classes of HTN

**Response**: No - analyses are conducted overall and among those with Stage 1 HTN  
  
**Comment 6**: Please calculate the observed power for the major hypothesis being tested and give all the relevant assumptions and measure of association of interest.

**Response:** No, this would be a post-hoc power analysis, which is invalid. See the analysis here: <https://gpsych.bmj.com/content/32/4/e100069>. The authors conclude “Power analysis is an indispensable component of planning clinical research studies. However, when used to indicate power for outcomes already observed, it is not only conceptually flawed but also analytically misleading. Our simulation results show that such power analyses do not indicate true power for detecting statistical significance, since post hoc power estimates are generally variable in the range of practical interest and can be very different from the true power.”  
  
**Comment 7**: In the discussion please be specific on the SPRINT trial and address whether or not those with Stage 1 hypertension in the absence of CKD or age > 65 benefitted from more intensive BP control. If such an analysis has not been done, then please indicate the need for such a report.

**Response**: We may say “the SPRINT trial did not assess the benefit of more intensive BP control among the subgroup of participants with stage 1 hypertension” to clarify.

**Reviewer #2 (Comments for the Author (Required)):**

NOTE: this reviewer left a paragraph with mostly nice things to say. I put comments on the brief suggestions that the reviewer made indicating my response.

Authors present a study of risk assessment based on the 2017 ACC/AHA BP guidelines to initiate anti-hypertensive medication based on ASCVD risk to estimate the proportion of adults from these high risk cohorts that would meet high ASCVD risk by utilizing the NHANES data. The authors raise an important point in that the 10 year ASCVD risk should computed for all adults with hypertension based on these guidelines and more importantly for all adults with stage 1 hypertension and without clinical CVD as many may not be at high ASCVD risk. The authors should be commended for highlighting risk in CKD and DM patients who have long been understudied and excluded from RCTs previously. As the authors note at the end of the first paragraph of the introduction, references 1 and 3 point out the true issue in regular clinical practice as physicians do not strictly apply risk assessment or prediction tools as guidelines recommend. The methodology employed was appropriate and well described in the manuscript. The results section is a bit difficult to follow with the numeric data presented as % for each of the three subgroups for prevalence of stage 1 HTN, then median % of 10 yr ASCVD risk, and other endpoints. The authors may want to consider re-ordering such that CKD, DM, age instead of the current order of DM, CKD then age. The discussion is well laid out and clearly contextualizes the findings in the larger setting of how best to treat and risk stratify these important populations. The statement of "..for younger adults, with DM or CKD, early initiation of anti-hypertensive medication may be an important step towards lowering lifetime CVD risk" is very important to emphasize.   
On page 17, the authors should review reference #13, as they summarize that those who were recommended therapy were 6 times higher risk of CVD event over the following 8 years. Is this reversed? If not, the authors should insert a sentence after line 6 of that paragraph to expand and offer an explanation why those offered anti-hypertensive therapy may be at higher risk.   
On page 18, the authors should add the year of publication of the meta-analysis in the text.   
The authors should also add some discussion about BP variability to their discussion to better contextualize their findings.   
Finally, the authors aptly conclude, "While the majority of US adults with DM, CKD, age >65 had high ASCVD risk, many with stage 1 hypertension and DM or CKD did not."