Non-dialysis-dependent chronic kidney disease (NDD-CKD) patients are at risk of anemia. While prevalence of anemia in dialysis patients is high, little is known about contemporary prevalence of anemia and its treatment patterns in the NDD-CKD population.

**Objective**
- Estimate anemia prevalence and characterize anemia treatment using the Truven MarketScan database.

**Methods**
- The study population consisted of stage 3-5 NDD-CKD commercially insured patients aged 18 to 63 years in 2012 from the MarketScan database.
- As shown in Figure 1, the baseline period, 1 year before the index date - 90 days, was used to define CKD stage, anemia, and comorbid conditions.

**Results**
- A total of 56,188 stage 3-5 NDD-CKD patients were identified (42,587 stage 3, 8,994 stage 4, and 4,607 stage 5).
- Anemia prevalence
  - Overall was 28.0% and increased by CKD stage (22.4% in stage 3, 41.3% in stage 4, 53.9% in stage 5).
  - Increased by age and was significantly higher in women across all ages and CKD stages.
  - Highest among patients with a diagnosis of liver disease (52.2%) or congestive heart failure (47.9%) during the study period.
- Anemia treatment
  - Among all stage 3-5 NDD-CKD patients with anemia, RBC transfusions were the most commonly used (11.7%), followed closely by ESAs (10.8%), and IV iron (9.4%).
  - ESAs use increased by CKD stage, from 6.5% in stage 3 to 19.9% in stage 5.
  - RBC transfusions were the most common treatment for stage 3 NDD-CKD patients.
  - IV iron treatment was generally lower, also increasing by stage, ranging from 7.8% to 12.9%.
  - A smaller percentage of patients received more than one anemia treatment modality (Figure 3). Among stage 3-5 NDD-CKD patients combined, 5.2% received more than one anemia treatment.

**Conclusions**
- Anemia prevalence increased by CKD stage and age, and women were more likely to be anemic.
- 26% of stage 3-5 NDD-CKD patients received treatment for anemia, and treatment patterns varied by stage.