The study objection consisted of 19 cases diagnosed total or partial (APVC) by STIC flow images and 8 cases anatomical databases established between Jan 2013 to Jan 2018. STIC blood flow imaging could better display the anatomic structure and the spatial relationships of the vessels. Eight cases with supracardiac TAPVC, Two cases with intracardiac TAPVC, Five cases with infracardiac TAPVC, One case with mixed APVC, Three cases with PAPVC, including one case was Scimitar syndrome.

**Conclusion**

The original and constructed anatomical databases could be displayed continuously and dynamically and rotated inarbitrary angles by amira5.3.1 3D software. All the functions above are consistent with the STIC blood flow images. The functions of the anatomy database and STIC blood flow images vividly depicted the course and drainage of pulmonary veins in fetal APVC. Which can help students and trainers understanding and grasping the characters of the anomaly and ultrasound features and improving the prenatal diagnosis rate.