JZGXP preparation method

JZGXP prescription consists of 375g of Salvia miltiorrhiza, 187.5g of red peony root, 187.5g of Chuanxiong, 187.5g of safflower, and 125g of Lignum Dalbergiae Odoriferaee. The method of preparation is to extract volatile oil from the Lignum Dalbergiae Odoriferae, and the aqueous solution after distillation is collected in a container , the red peony root , Salvia miltiorrhiza , Chuanxiong and safflower were heated to reflux twice with 85% ethanol, the first heating and reflux for 3 hours, the second 2 hours, filtered, the filtrate was combined, the ethanol was recovered, combined with the above aqueous solution, and concentrated under reduced pressure to a relative density of 1.35. ~ 1.40 (50 °C), add appropriate amount of auxiliary materials, made into granules, and then dried, then add the Lignum Dalbergiae Odoriferae volatile oil and mix, press into 1000 pieces, and then sugar coating, so you get JZGXP.

Animal handling

120 male Sprague-Dawley rats aged 6 weeks, weighing 280g±20g (provided by Liaoning Changsheng Biotechnology Co., Ltd.), were conditioned for one week before modeling, feeding at room temperature, quantitative feeding, and free drinking water. Divided into blank group (40) and model group (80). During the modeling period, the rats in the blank group were fed with basal diet, and the rats in the model group were fed with high-fat diet (cholesterol 4%, lard 10%, white sugar 5%)，propyl thiouracil 0.2%, sodium cholate 0.5%, the rest is the basic feed (home made), free drinking water. On the first day of modeling, rats in the model group were intraperitoneally injected with vitamin D3 (600,000 IU/kg), and rats in the blank group were intraperitoneally injected with an equal volume of normal saline. At the 2nd, 4th and 6th week of modeling, the rats in the model group were supplemented with vitamin D3 (100,000 IU/kg), and the rats in the blank group were intraperitoneally injected with an equal volume of normal saline. After the model was successfully replicated, the experimental animals were regrouped. Divided into model group (8), positive control group (8), JZGXP low-dose administration group (8), JZGXP medium doseadministration group (8), JZGXP high dose administration

group (8). The rats in the positive control group were given aspirin by intragastric administration. The rats in the low, medium and high dose groups were given the corresponding doses of JZGXP. The rats in the blank group and the model group were given the same volume of distilled water. The administration time was 28 days.

JZGXP low, medium and high doses

Take some JZGXP, pulverize it into powder with a pulverizer, sieve it, and set it aside. According to human body equivalent dose conversion, the final dosage is 0.81g / kg.d. According to the conversion dose of 1 times, 2 times, 4 times with distilled water to prepare JZGXP low dose suspension is 0.81g / Kg.d, JZGXP medium dose suspension is 1.62 g / kg.d, the high dose suspension of JZGXP is 3.24 g/kg. The configured drug solution was stored at 4 °C for storage. Slowly to normal temperature before use and shake well.

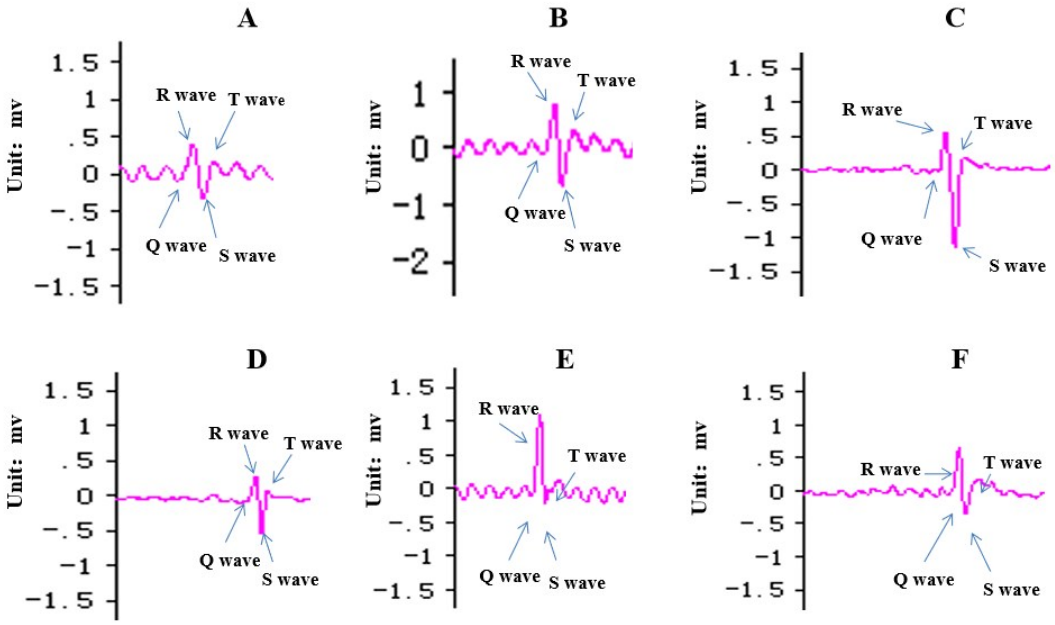


Fig S1 The electrocardiogram of each group

A: Control group; B: Model group; C: Positive group; D: The low dosage of JZGXP; E: The middle dosage of JZGXP; F: The high dosage of JZGXP

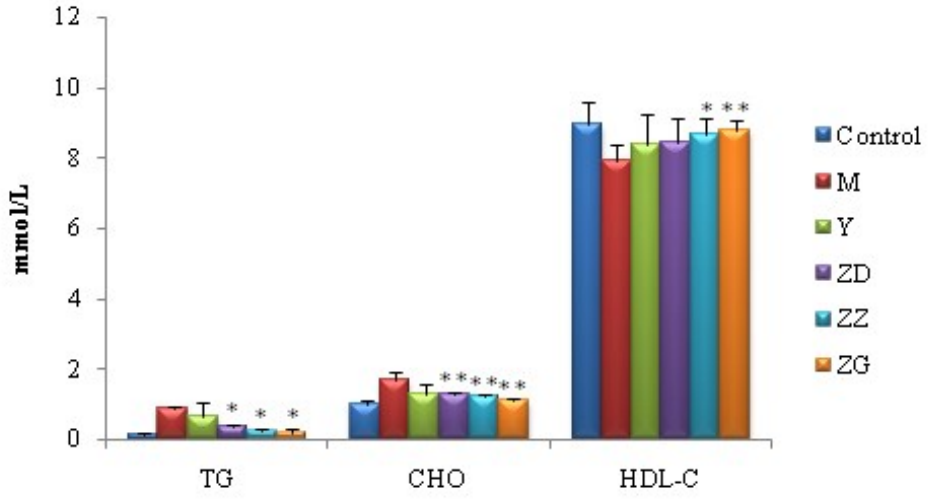


Fig S2 The content of TG, CHO, HDL-C in rats serum

Control: Control group; M: Model group; Y: Positive group; ZD: The low dosage of JZGXP; ZZ: The middle dosage of JZGXP; ZG: The high dosage of JZGXP (Compared model group ,*P<0.05, **P<0.01)

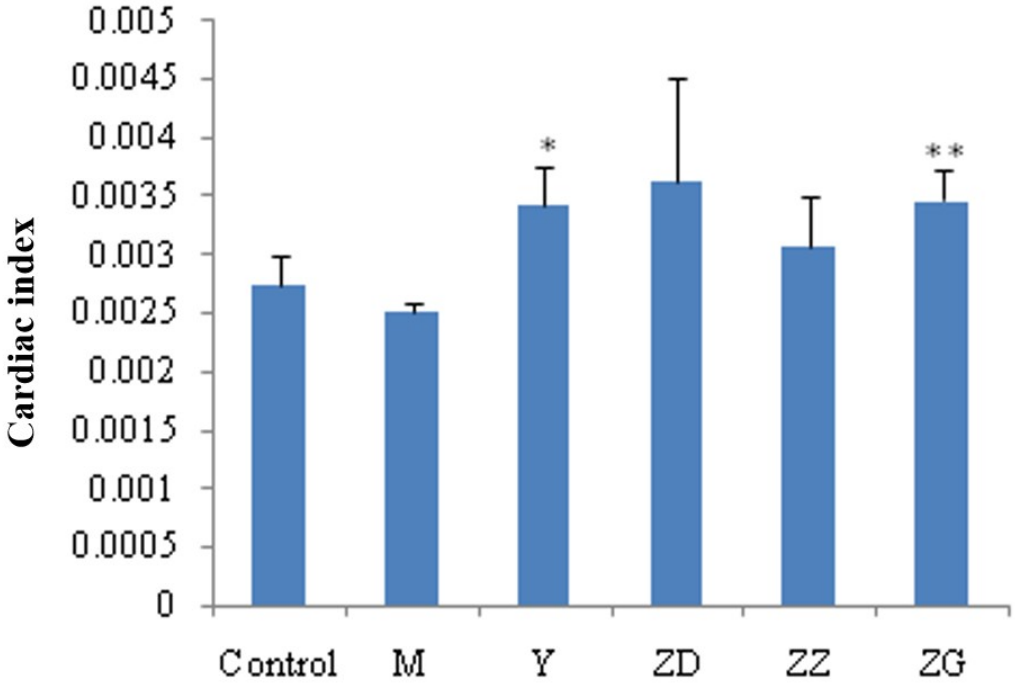
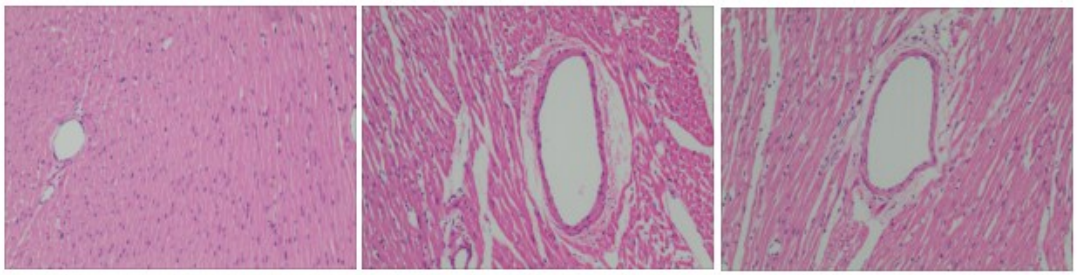
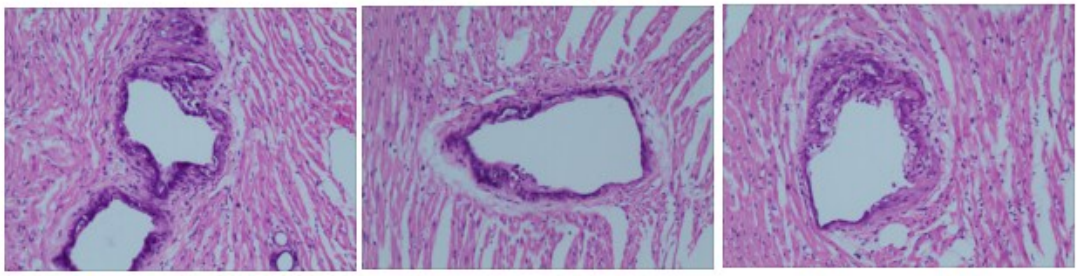


Fig S3 The cardiac index of each group

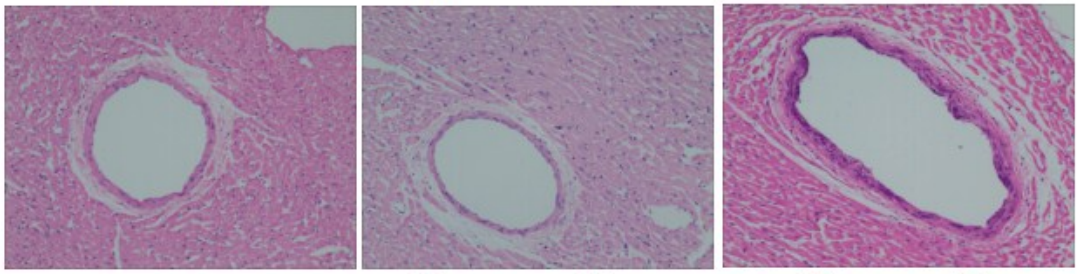
Control: Control group; M: Model group; Y: Positive group; ZD: The low dosage of JZGXP; ZZ: The middle dosage of JZGXP; ZG: The high dosage of JZGXP(Compared model group, *P<0.05, **P<0.01)



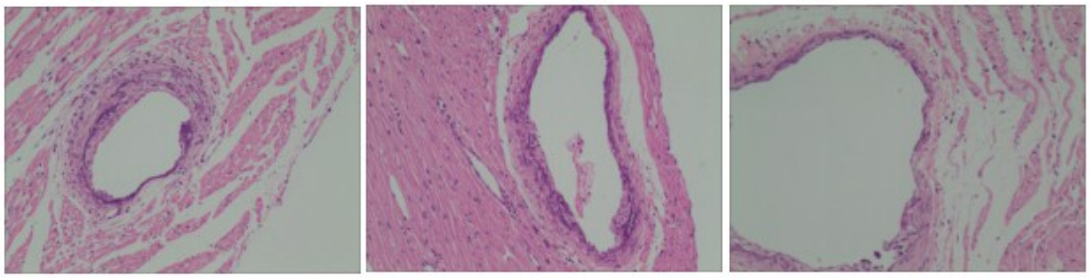
C1 ×100 C2 ×100 C3 ×100



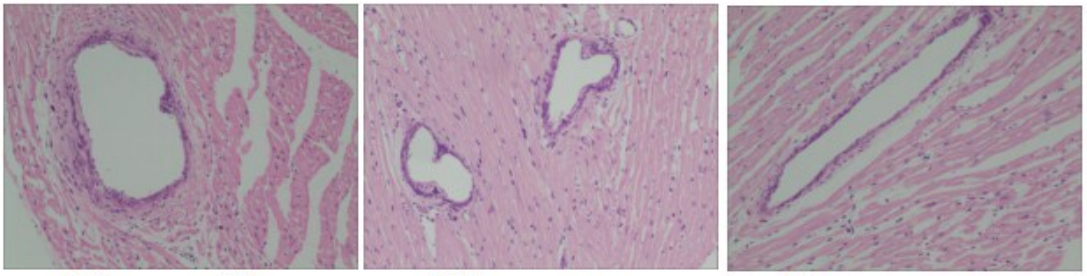
M1 ×100 M2 ×100 M3 ×100



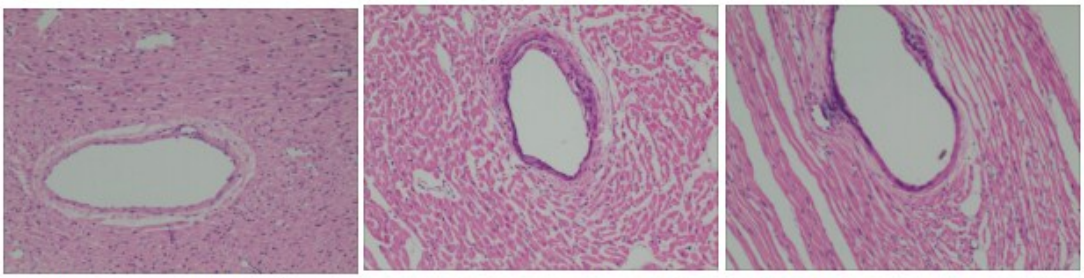
Y1 ×100 Y2 ×100 Y3 ×100



ZD1 ×100 ZD2 ×100 ZD3 ×100



ZZ1 ×100 ZZ2 ×100 ZZ3 ×100



ZG1 ×100 ZG2 ×100 ZG3 ×100

Fig S4 The coronary and myocardial pathology results after oral administration of JZGXP for 28 days.

C1-C3: Control group; M1-M3: Model group; Y1-Y3: Postive group; ZD1-ZD3: The low dosage of JZGXP; ZZ1-ZZ3: The middle dosage of JZGXP; ZG1-ZG3: The high dosage of JZGXP