

FIG 45: Electron Micrographs of endothelium layer of thoracic aorta (1cm is equivalent to 2 μ m; Stained with Uranyl acetate and lead citrate)

A) Normal Control

B) Diabetic (Db) Groups (I) Db Control (II) Db + Insulin (0.6 IU/kg) (III) Db + YS 49 1.6 mg/kg (IV) Db + DAQB1 (5 mg/kg) (V) Db + Insulin (0.6 IU/kg)+ wortmannin (100 μ g/kg) (VI) Db +Insulin (0.6 IU/kg) +UCN 01(0.35 mg/kg) (VII) Db + Insulin (0.6 IU/kg) +API-2(1 mg/kg) (VIII) Db +L-NAME (25mg/kg) (IX) Db +Atorvastatin (30mg/kg).

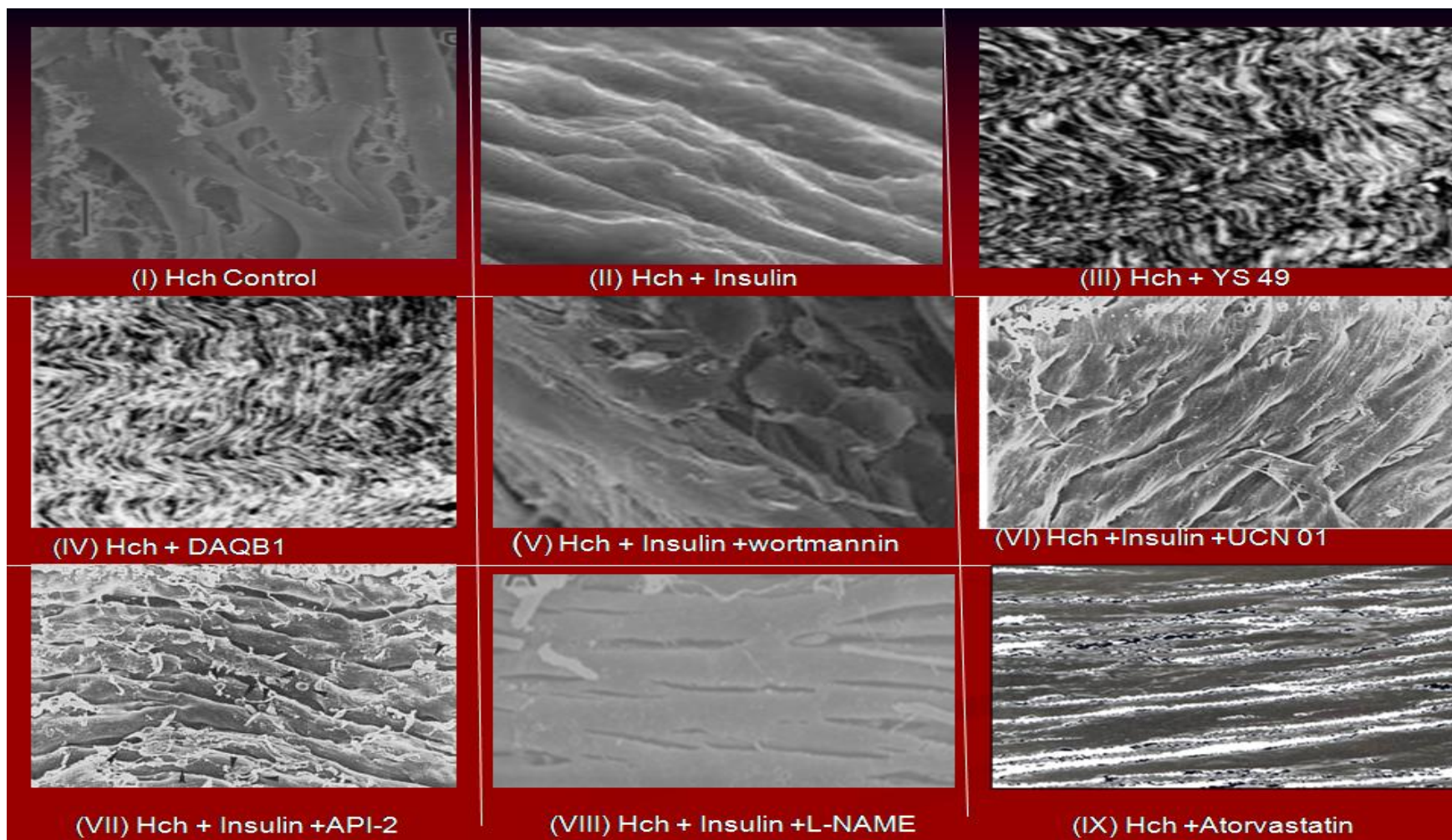


FIG 45 C : Electron Micrographs of endothelium layer of thoracic aorta (1cm is equivalent to 2 μ m; Stained with Uranyl acetate and lead citrate)

Hypercholesterolemic(Hch) Groups (I) Hch Control (II) Hch + Insulin (0.6 IU/kg) (III) Hch + YS 49 1.6 mg/kg) (IV) Hch + DAQB1 (5 mg/kg) (V) Hch + Insulin (0.6 IU/kg)+ wortmannin (100 μ g/kg) (VI) Hch +Insulin (0.6 IU/kg) +UCN 01(0.35 mg/kg) (VII) Hch + Insulin (0.6 IU/kg) +API-2(1 mg/kg) (VIII) Hch +L-NAME (25mg/kg) (IX) Hch +Atorvastatin (30mg/kg).

(UCN-01 = 7-hydroxystaurosporine; API-2 = Triciribine; **L-NAME- NG-Nitro-L-arginine methyl ester)

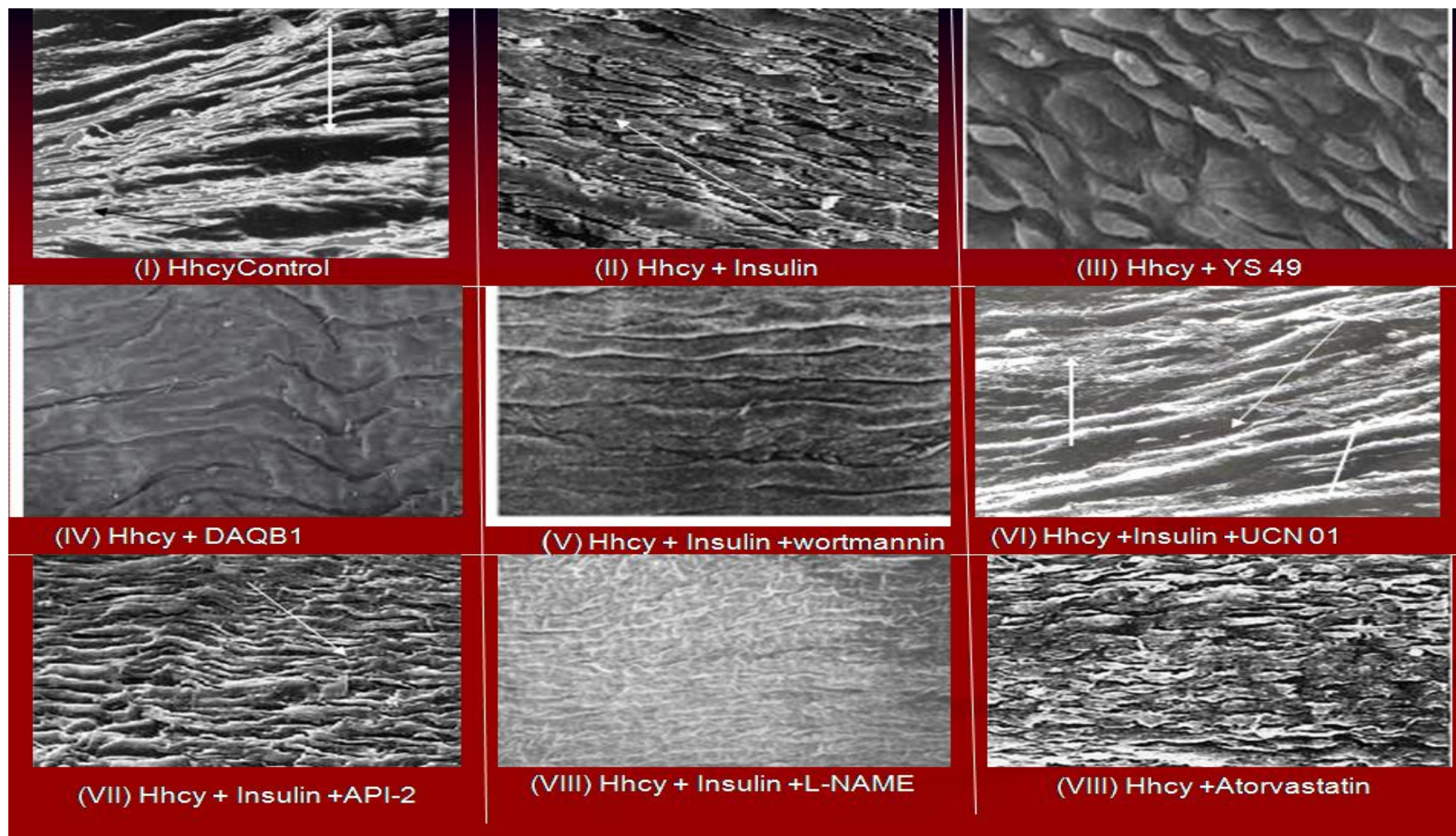


FIG 45D): Electron Micrographs of endothelium layer of thoracic aorta (1cm is equivalent to 2 μ m; Stained with Uranyl acetate and lead citrate)
 Hyperhomocytinemic (Hhcy) Groups (I) Hhcy Control (II) Hhcy + Insulin (0.6 IU/kg) (III) Hhcy + YS 49 1.6 mg/kg (IV) Hhcy + DAQB1 (5 mg/kg) (V) Hhcy + Insulin (0.6 IU/kg)+ wortmannin (100 μ g/kg) (VI) Hhcy +Insulin (0.6 IU/kg) +UCN 01(0.35 mg/kg) (VII) Hhcy + Insulin (0.6 IU/kg) +API-2(1 mg/kg) (VIII) Hhcy +L-NAME (25mg/kg) (IX) Hhcy +Atorvastatin (30mg/kg)
 (UCN-01 = 7-hydroxystaurosporine; API-2 = Triciribine; **L-NAME- NG-Nitro-L-arginine methyl ester.)

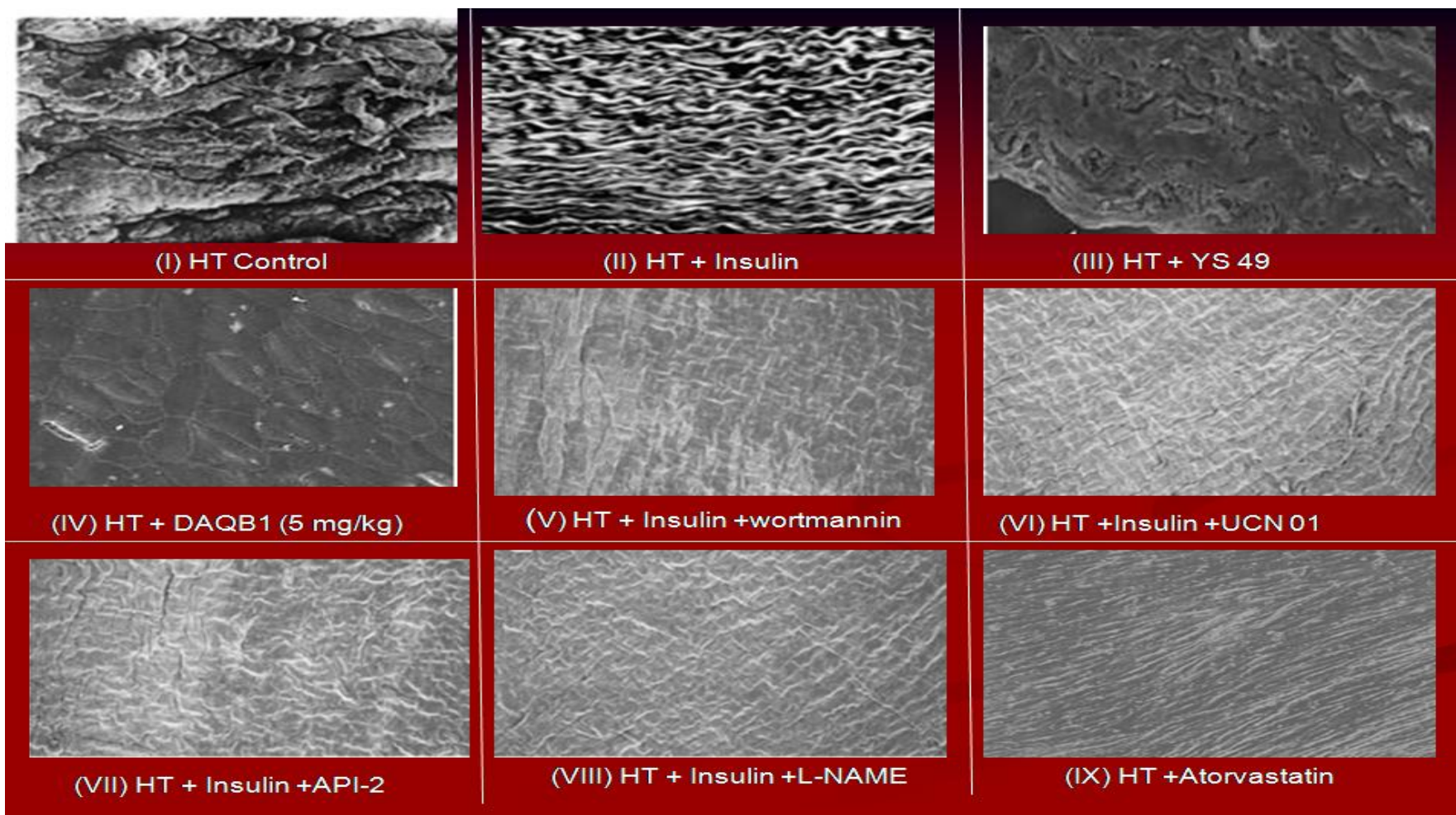


FIG 45E): Electron Micrographs of endothelium layer of thoracic aorta (1cm is equivalent to 2 μ m; Stained with Uranyl acetate and lead citrate)
 HTertensive(HT) Groups (I) HT Control (II) HT + Insulin (0.6 IU/kg) (III) HT + YS 49 1.6 mg/kg (IV) HT + DAQB1 (5 mg/kg) (V) HT + Insulin (0.6 IU/kg)+
 wortmannin (100 μ g/kg) (VI) HT +Insulin (0.6 IU/kg) +UCN 01(0.35 mg/kg) (VII) HT + Insulin (0.6 IU/kg) +API-2(1 mg/kg)(VIII) HT +L-NAME (25mg/kg) (IX) HT
 +Atorvastatin (30mg/kg)
 (UCN-01 = 7-hydroxystaurosporine; API-2 = Triciribine ; **L-NAME- NG-Nitro-L-arginine methyl ester)

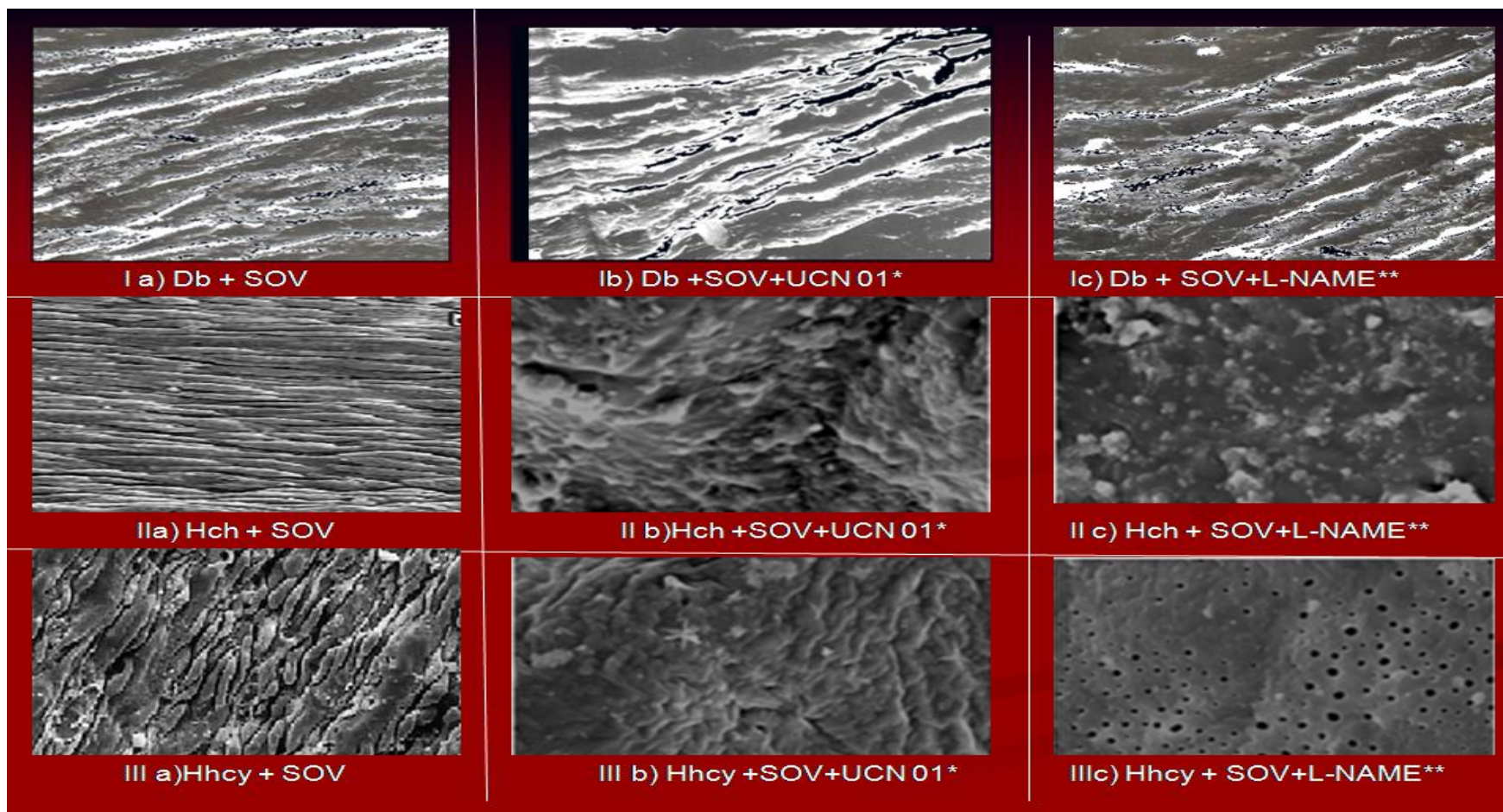


FIG 46: Electron Micrographs of endothelium layer of thoracic aorta (1cm is equivalent to 2 μ m; Stained with Uranyl acetate and lead citrate)

I) Diabetic (Db) Groups I(a) Db + SOV (24 mg/kg) I(b) Db +SOV (24 mg/kg)+UCN 01*(0.35 mg/kg)I(c) Db + SOV(24 mg/kg) +L-NAME)**(25 mg/kg) **II)** Hypercholesterolemic (Hch) Groups II(a) Hch + SOV(24 mg/kg) II(b) Hch +SOV (24 mg/kg) + UCN-01*(0.35 mg/kg) II(c) Hch+ SOV (24 mg/kg) + L-NAME** (25 mg/kg).

III)Hyperhomocysteinemia (Hhcy) Groups III(a) Hhcy + SOV (24 mg/kg) III(b) Hhcy +SOV (24 mg/kg) + UCN-01*(0.35 mg/kg)III(c) Hhcy+ SOV (24 mg/kg) + L-NAME** (25 mg/kg). (*UCN-01 - 7-hydroxystaurosporine; **L-NAME- NG-Nitro-L-arginine methyl ester).

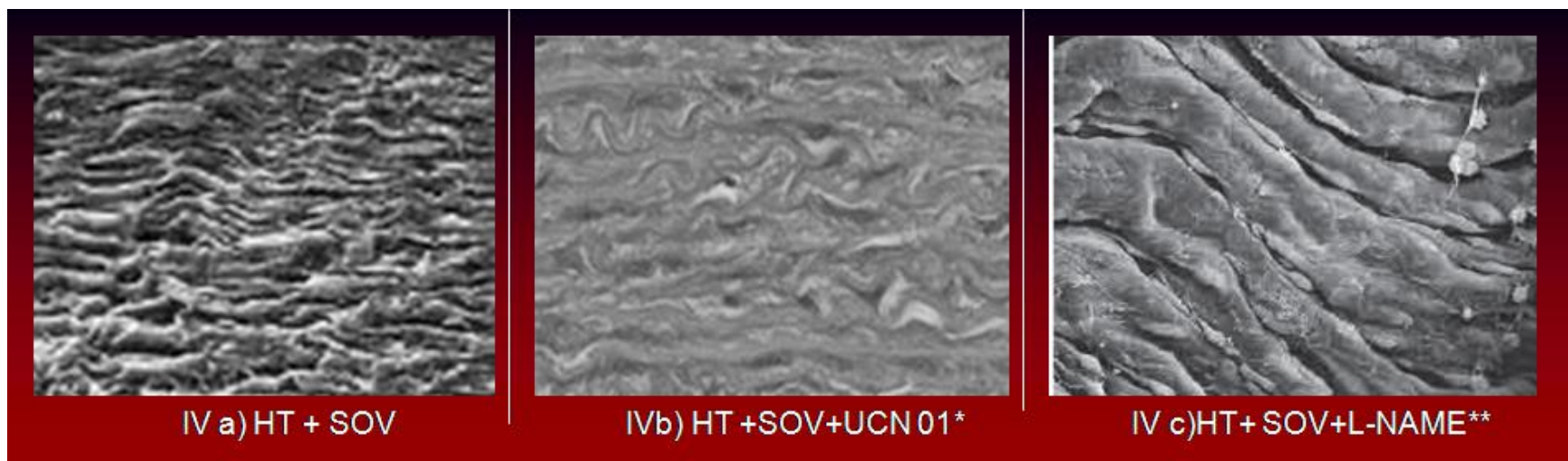


FIG 46: Electron Micrographs of endothelium layer of thoracic aorta (1cm is equivalent to 2 μ m; Stained with Uranyl acetate and lead citrate)

IV) Hypertensive (Hyp) Groups IV(a) Hyp + SOV (24 mg/kg) IV(b) Hyp +SOV (24 mg/kg) +UCN 01*(0.35 mg/kg)IV(c) Hyp + SOV (24 mg/kg) +L-NAME**(25 mg/kg).

(*UCN-01 - 7-hydroxystaurosporine; **L-NAME- NG-Nitro-L-arginine methyl ester).