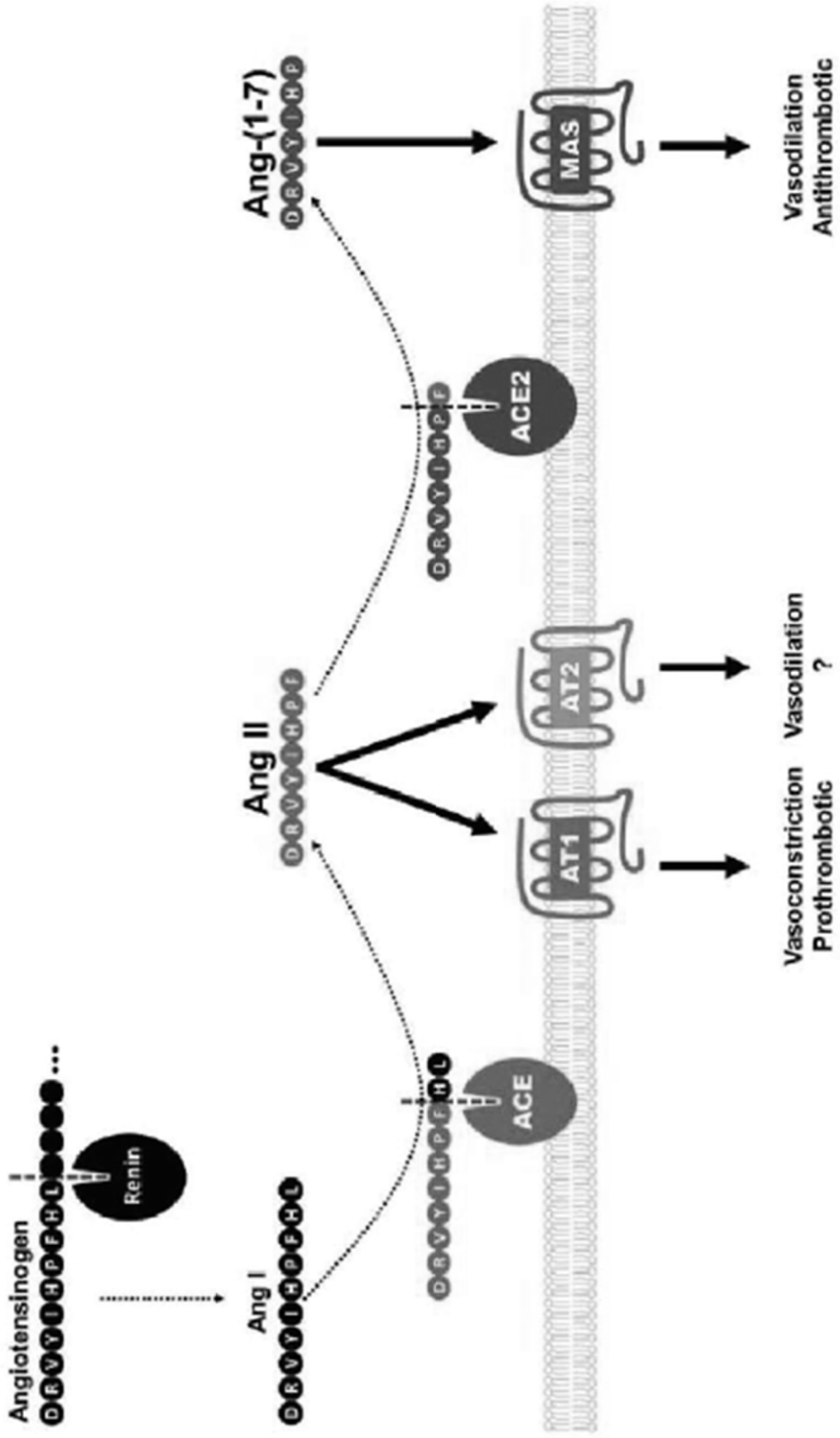

Angiotensinogen
Renin
Ang I
ACE
Ang II
AT1
AT2
Vasoconstriction
Prothrombotic
Vasodilation
?
ACE2
Ang-(1-7)
MAS
Vasodilation
Antithrombotic

FIG. 1A

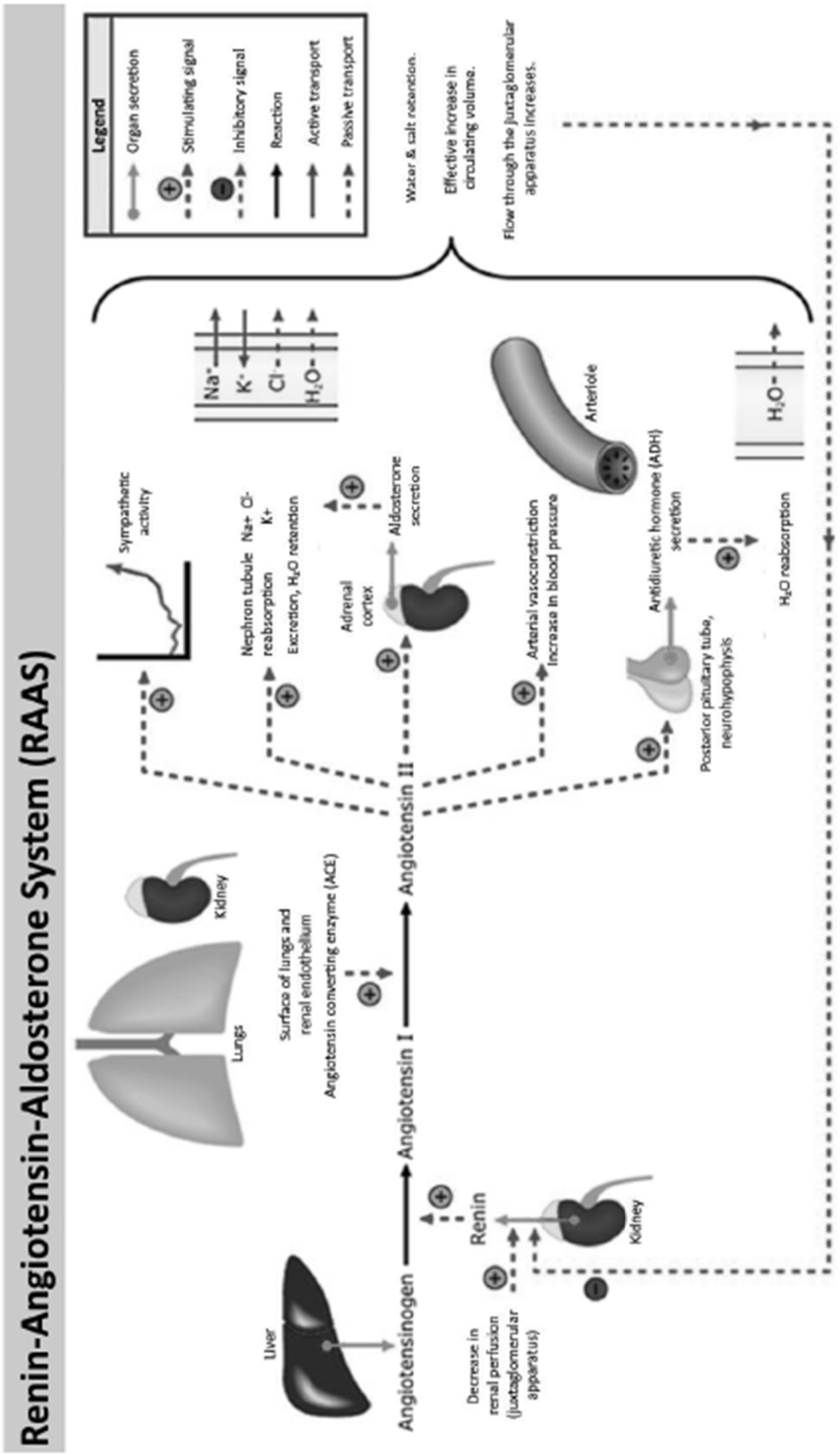

Renin-Angiotensin-Aldosterone System (RAAS)
Legend
Organ secretion
Stimulating signal
Inhibitory signal
Reaction
Active transport
Passive transport
Water & salt retention.
Effective increase in circulating volume.
Flow through the juxtaglomerular apparatus increases.
Liver
Angiotensinogen
Decrease in renal perfusion (juxtaglomerular apparatus)
Renin
Kidney
Angiotensin I
Surface of lungs and renal endothelium
Angiotensin converting enzyme (ACE)
Lungs
Kidney
Angiotensin II
Sympathetic activity
Nephron tubule reabsorption Na+ Cl- K+
Excretion, H2O retention
Adrenal cortex
Aldosterone secretion
Arterial vasoconstriction
Increase in blood pressure
Posterior pituitary tube, neurohypophysis
Antidiuretic hormone (ADH) secretion
H2O reabsorption
Arteriole
Na+
K+
Cl-
H2O
H2O

FIG. 1B

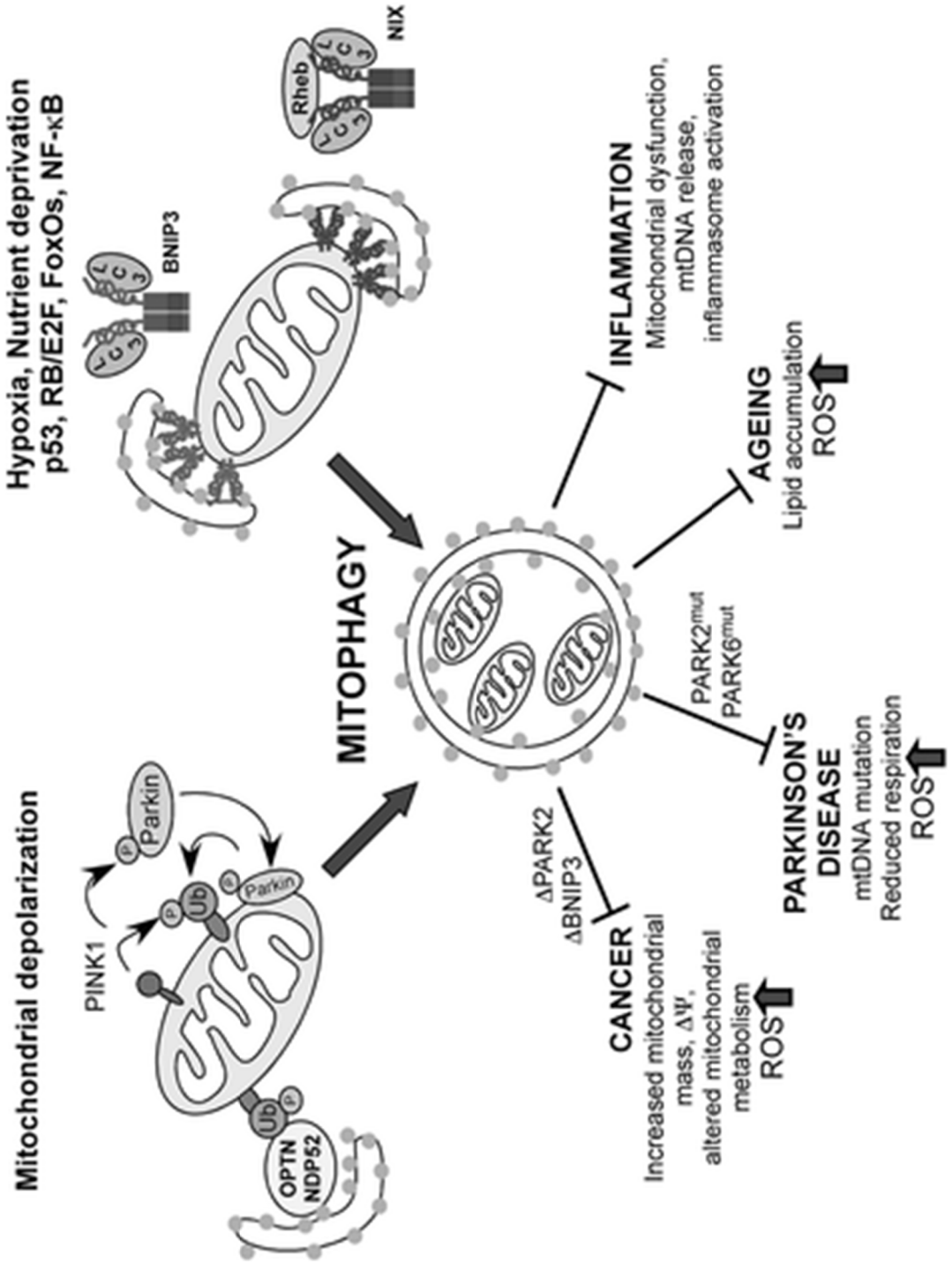

Hypoxia, Nutrient deprivation
p53, RB/E2F, FoxOs, NF-κB
BNIP3
Rheb
NIX
Mitochondrial depolarization
PINK1
Parkin
Ub
OPTN
NDP52
MITOPHAGY
INFLAMMATION
Mitochondrial dysfunction,
mtDNA release,
inflammasome activation
AGEING
Lipid accumulation
ROS
PARK2mut
PARK6mut
PARKINSON'S
DISEASE
mtDNA mutation
Reduced respiration
ROS
ΔPARK2
ΔBNIP3
CANCER
Increased mitochondrial
mass, ΔΨ,
altered mitochondrial
metabolism
ROS

FIG. 4

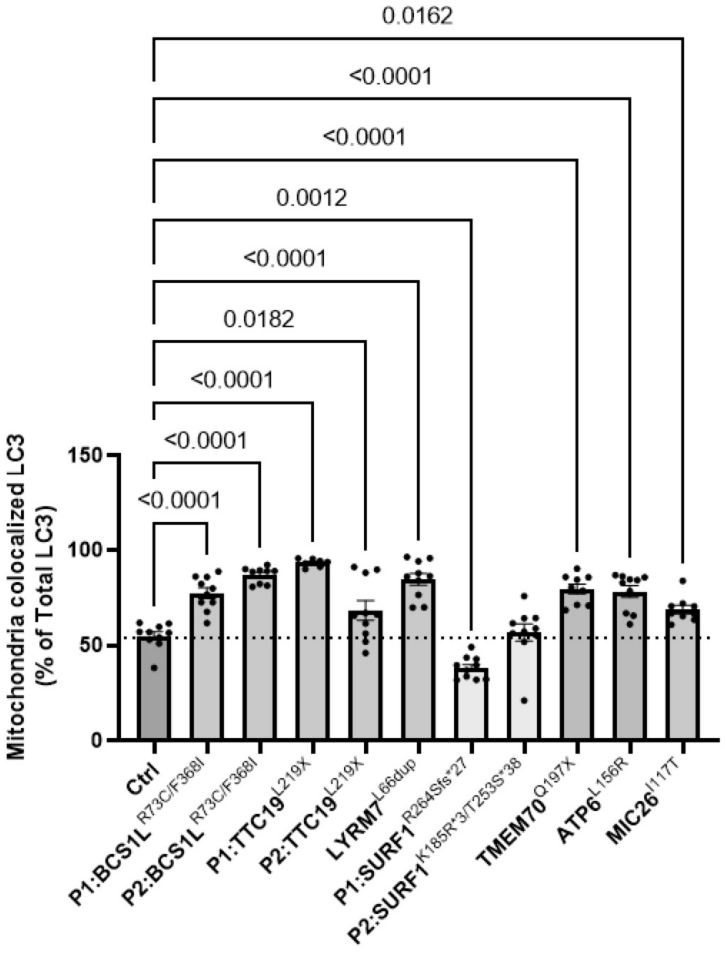

0.0162
<0.0001
<0.0001
0.0012
<0.0001
0.0182
<0.0001
<0.0001
<0.0001
Mitochondria colocalized LC3
(% of Total LC3)
150
100
50
0
Ctrl
P1:BCS1L R73C/F368I
P2:BCS1L R73C/F368I
P1:TTC19 L219X
P2:TTC19 L219X
LYRM7 L66dup
P1:SURF1 R264Sfs*27
P2:SURF1 K185R*3/T253S*38
TMEM70 Q197X
ATP6 L156R
MIC26 I117T

FIG. 13