Supplementary Data

Table S1: The primers and probes for detection of *Ricketsiaceae*

Name	Sequence (5'-3')
Primer *47* F	AACTGATTTTATTCAAACTAATGCTGCT
Primer *47* R	TATGCCTGAGTAAGATACRTGAATRGAATT
Probe *47*	6FAM-TGGGTAGCTTTGGTGGACCGATGTTTAATCT-TAMRA
Primer *17* F	GGGCGGTATGAAYAAACAAG
Primer *17* R	CCTACACCTACTCCVACAAG
Probe *17*	FAM-CCGAATTGAGAACCAAGTAATGC-TAMRA
Primer *OmpB* F	TGGTATTACTGCTCAACAAGCT
Primer *OmpB* R	CAGTAAAGTCTATTGATCCTACACC
Probe *OmpB*	FAM-CGCGATCGTTAATAGCAGCACCAGCATTATCGCG-BHQ1

Note:

The Primer *47* F, Primer *47* R , Probe *47 was design to detecte Orientia Tsutsugamushi.*

The Primer *17* F; Primer *17* R; Probe *17 was used to diagnose bacteria of genera Rickettsia*

The Primer *OmpB* F; Primer *OmpB* R and Probe *OmpB was use to diagnose R.typhi.*

Table S2. The component of real-time PCR reaction

Components	Volume (µl)/reaction
DNA template	5.0
Master Mix	12.5
50mM $MgCl_2$	1.0
Forward primer (10 µM)	1.0
Reverse primer (10 µM)	1.0
Probe (10 µM)	1.0
Deionzed Water	3.5
Total	**25.0**

Table S3. The cycle of real-time PCR reaction

Stage	Cycle	Steps	Temperature [^{0}C]	Thời gian [hh:mm:ss]
Denaturation	1		95	00:02:00
Amplification	40	Denaturation	95	00:00:30
		Annealing	60	00:00:30

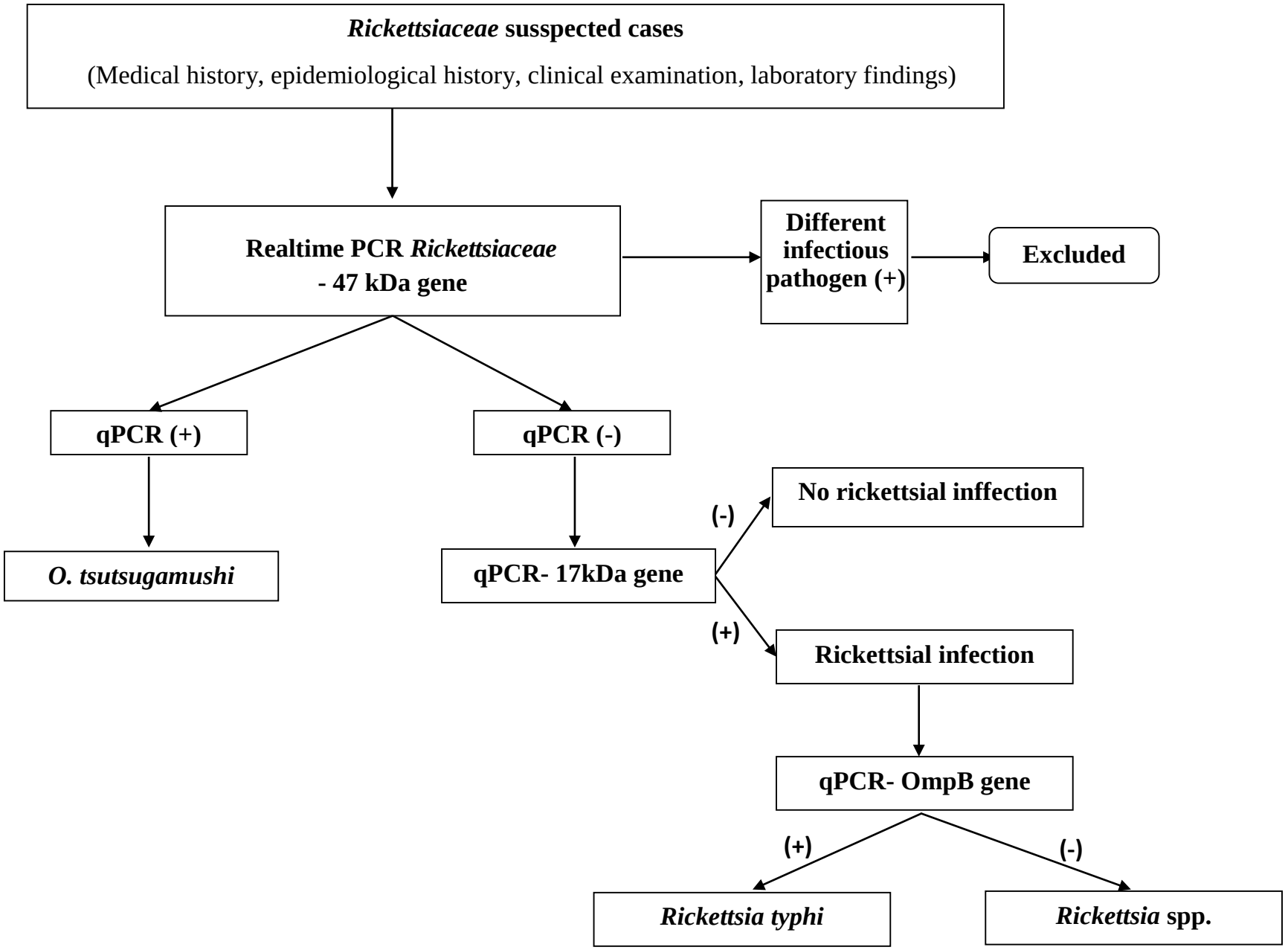

Figure S1. The steps of diagnosis Rickettsiosis patients and differentiating the *Rickettsiaceae* species

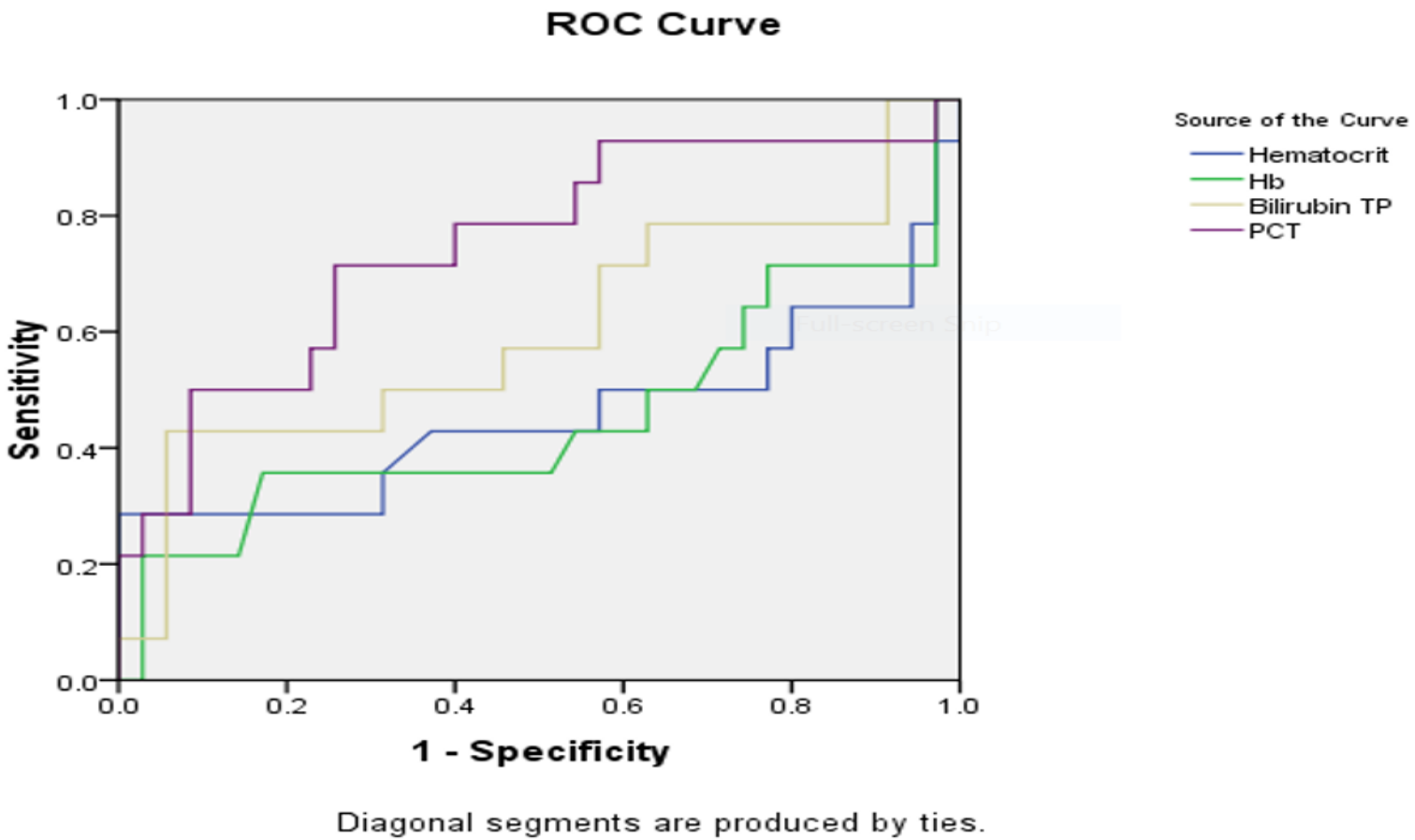

Figure S2. ROC analysis of some variables to predict severe complications in patients with rickettsial infection

PCT level had fair power to differentiate between 2 group of patients with AUC = 0.75. The others variable had no usefulness to differentiate between 2 groups of patients. At PCT value > 4.4 ng/ml, the specificity of PCT to predict severe complication was 94.4% however the sensitivity at this point was only 37.5%.