



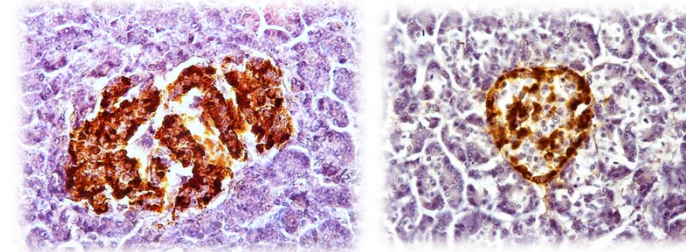
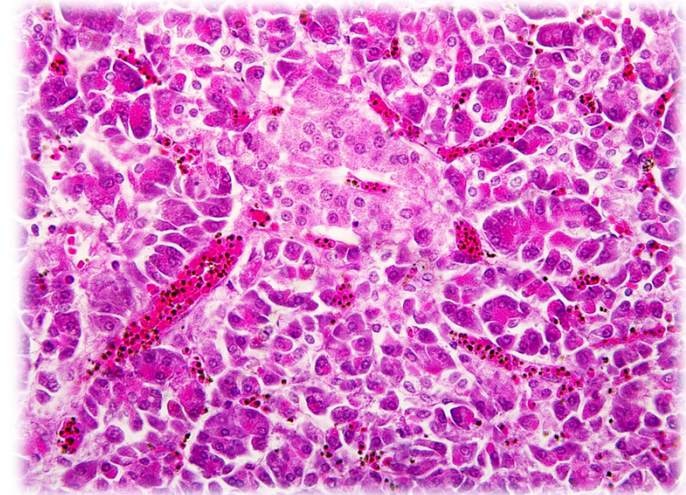
Mahidol University  
Faculty of Tropical Medicine

JITMM 2017

Joint International Tropical Medicine Meeting 2017

# Exploring Pancreatic Pathology In Severe *Plasmodium falciparum* Malaria

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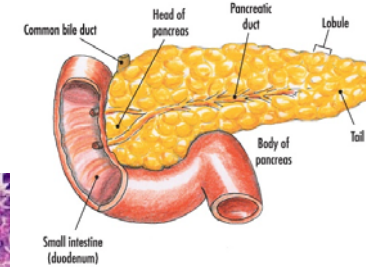
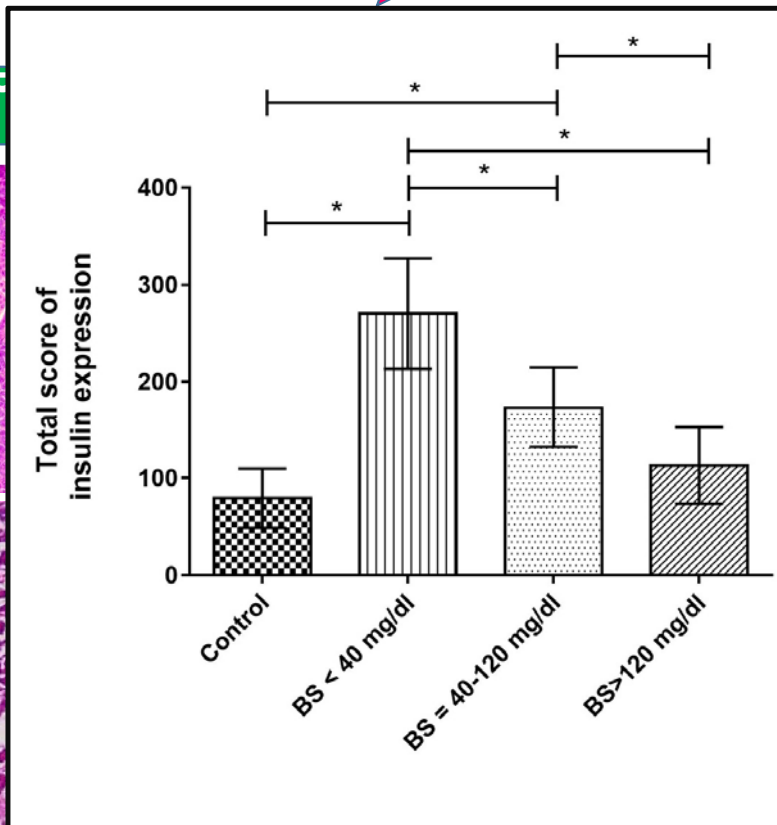
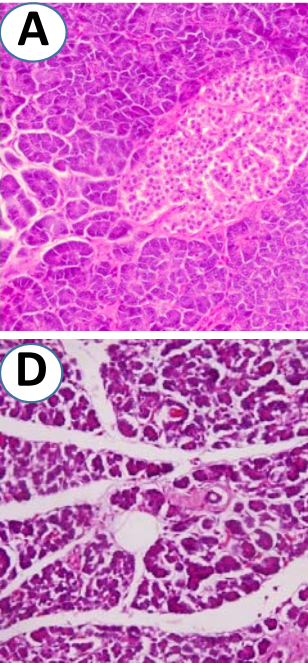
# Background

Hypoglycemia in severe malaria

- Disease severity
- Parasitemia
- Antimalarial drugs

# Objectives

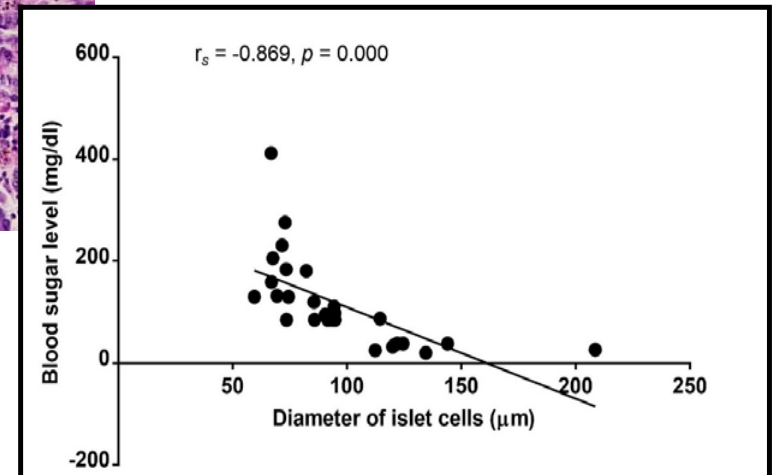
To explore the relationship between pancreatic pathology, including the expression of insulin and glucagon in the islets of Langerhans and BS level in *P. falciparum* malaria patients.



BS < 40 mg/dl

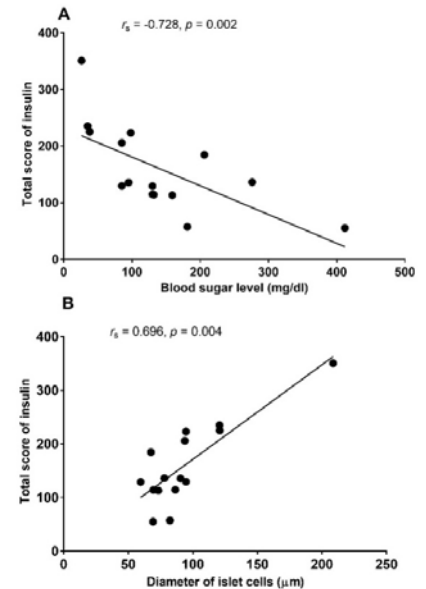
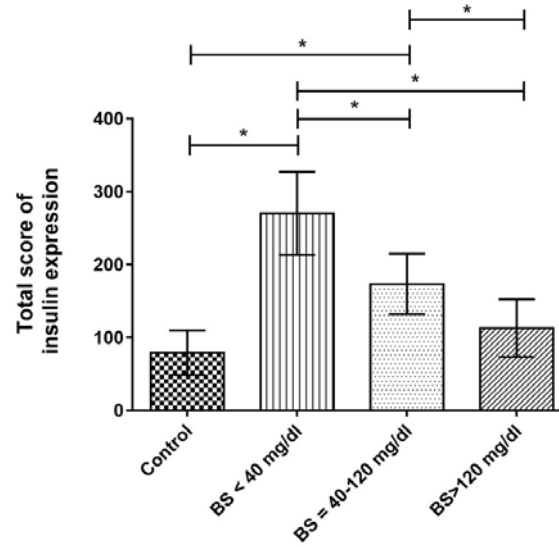
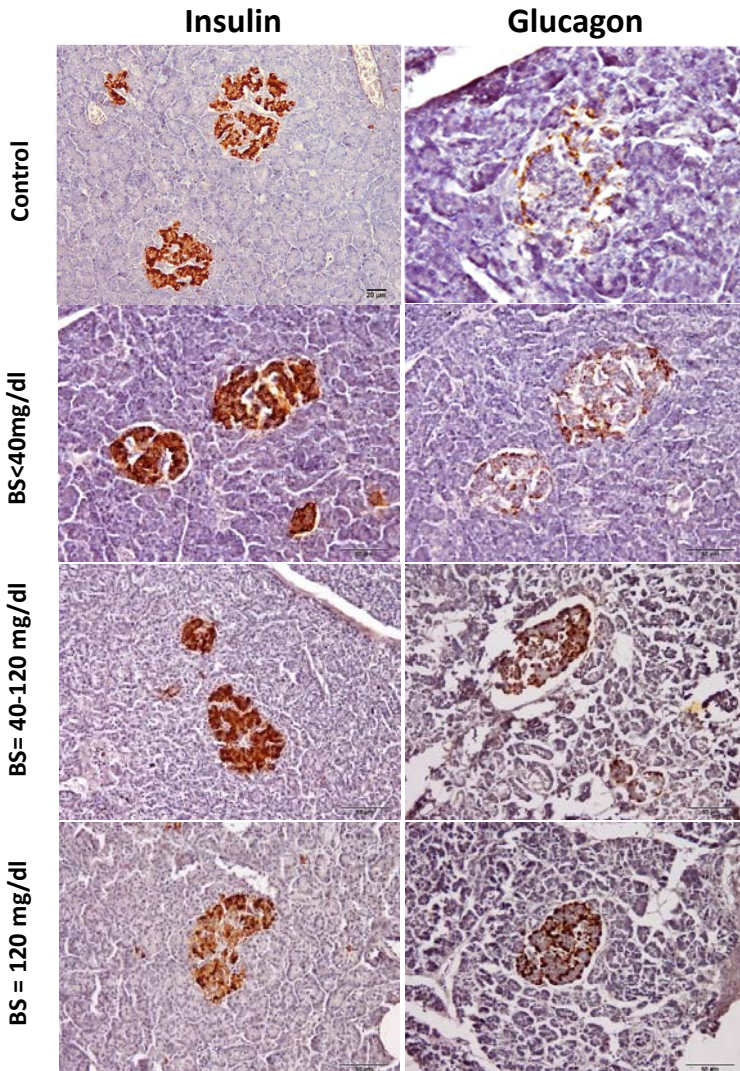
BS = 40-120 mg/dl

BS > 120 mg/dl





# Results & discussion: Immunohistochemistry



- An increase in insulin expression & islet cell size in patients with severe malaria could be a cause of hypoglycemia in malaria infection.
- IL-1, IL-6 released during malaria infection → islet cell hyperplasia  
 → enlargement of islet cells → ↑ insulin expression
- The findings will be useful in monitoring patients:
  - ➔ reduce the loss of pancreatic function &
  - ➔ prevent hypoglycemia in patients with severe *P. falciparum* malaria.



# ACKNOWLEDGEMENTS

- An appreciation is given to Dr. Mario Riganti for the use of left-over specimens and staff of the Department of Tropical Pathology for their help and support.
- This study was supported by Research Grant from the Faculty of Tropical Medicine, Mahidol University, Fiscal year 2015 (Grant No.: 0303/2558). SG is the grant recipient.

**Poster No.: 50**