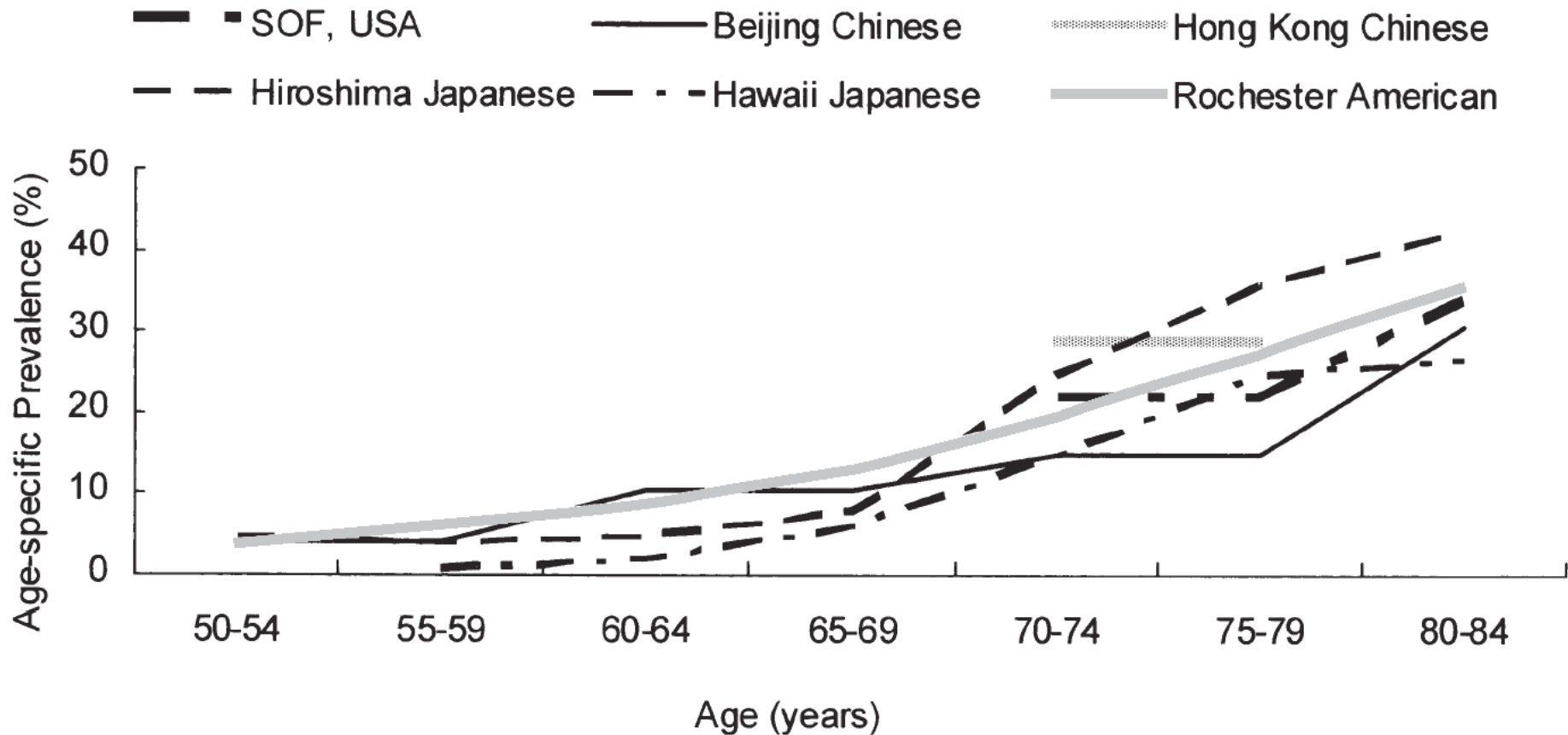


# Osteoporosis care around the globe: China and Hong Kong

Annie Kung  
Sir David Todd Professor  
Department of Medicine  
Queen Mary Hospital, Hong Kong

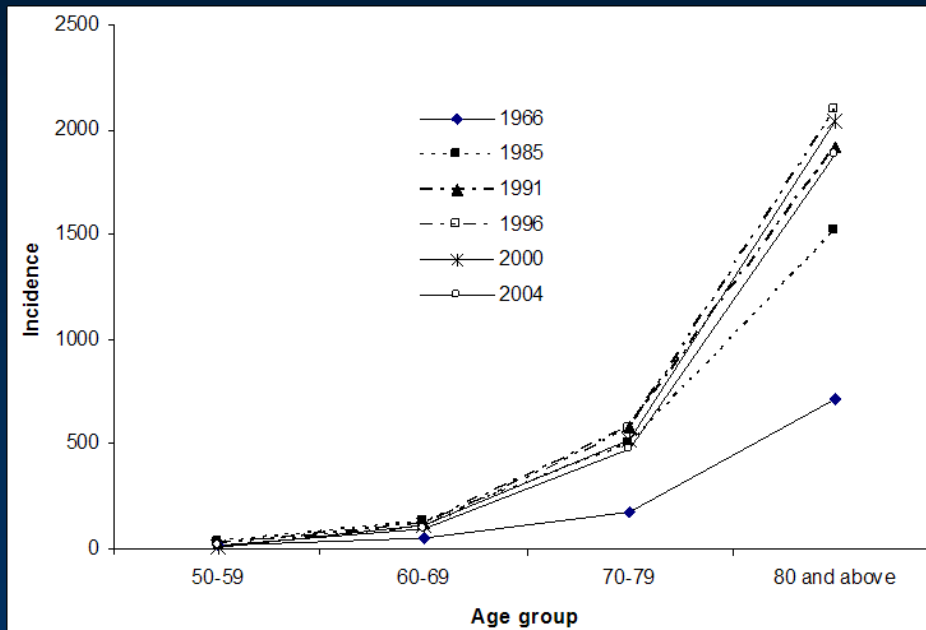
# Age-specific prevalence of vertebral fractures in Asian women compared to Caucasian women

(Vertebral fracture is defined as more than 3SDs below the mean of the vertebral height ratios)

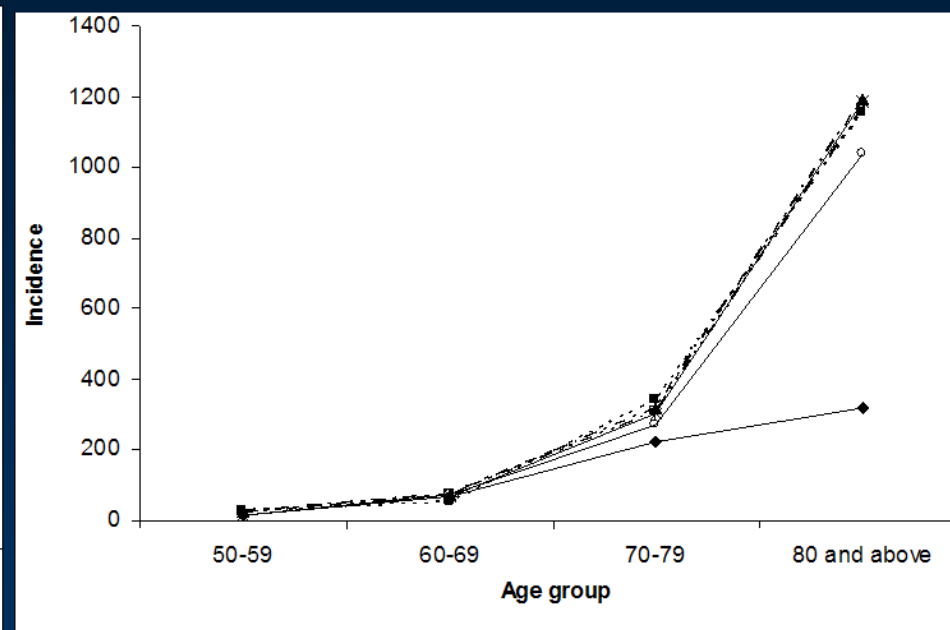


# Hip Fracture incidence in Hong Kong

## Women

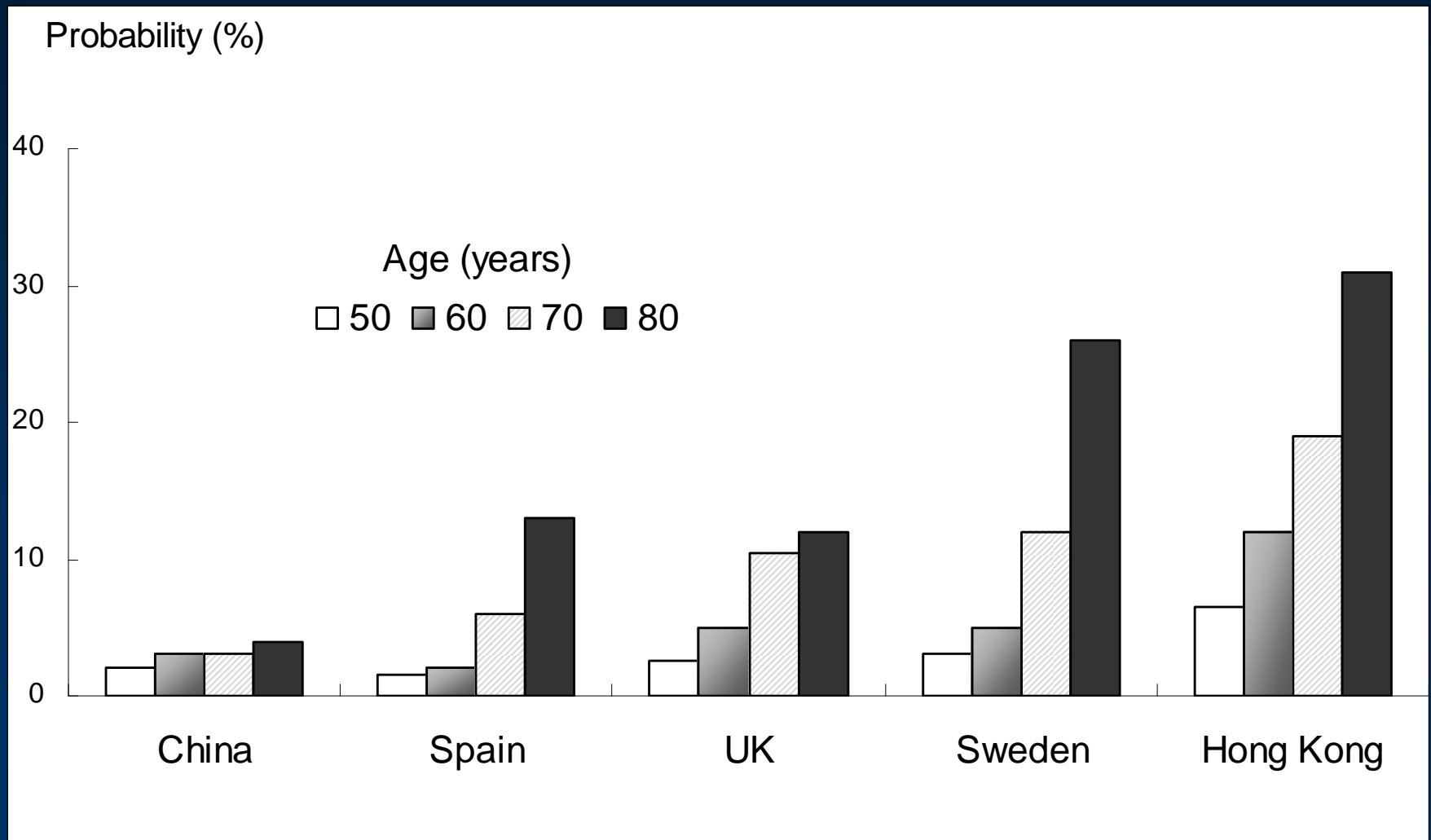


## Men



Kung et al. Osteoporos Arch (In Press)

# 10-year Probability of Osteoporotic Fracture (Hip, Clinical Spine, Forearm) by Age and Country



# Diagnosing Osteoporosis

Classification based on WHO recommendation  
BMD T scores based on a large Chinese database of  
>10,000 subjects

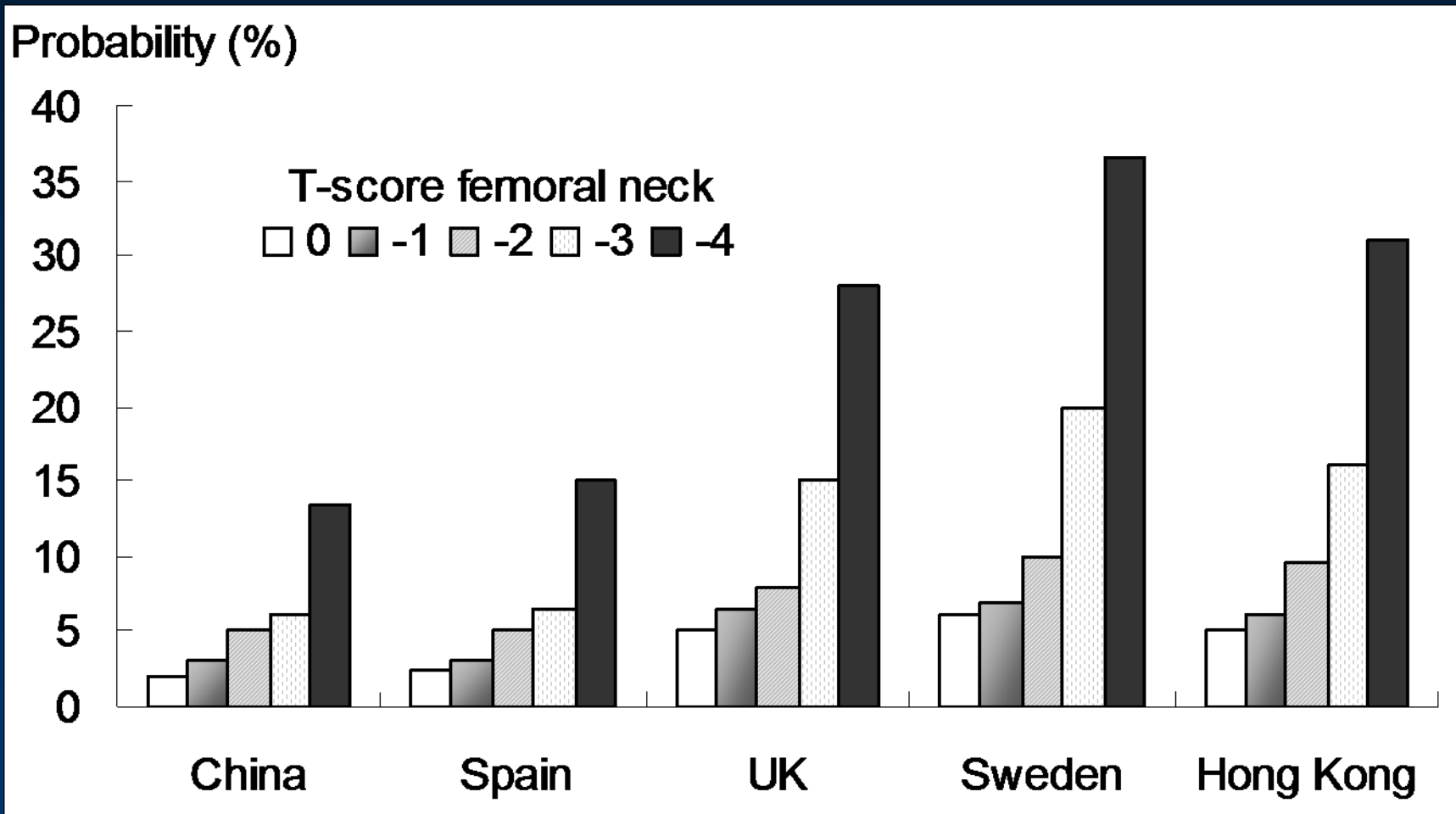
- absolute BMD in women about 10% lower than Caucasian values
- BMD at T-score = -2.5:

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	<b>Spine</b>	<b>Femoral Neck</b>
Caucasian	0.772 g/cm <sup>2</sup>	0.572 g/cm <sup>2</sup>
Chinese	0.693 g/cm <sup>2</sup>	0.521 g/cm <sup>2</sup>

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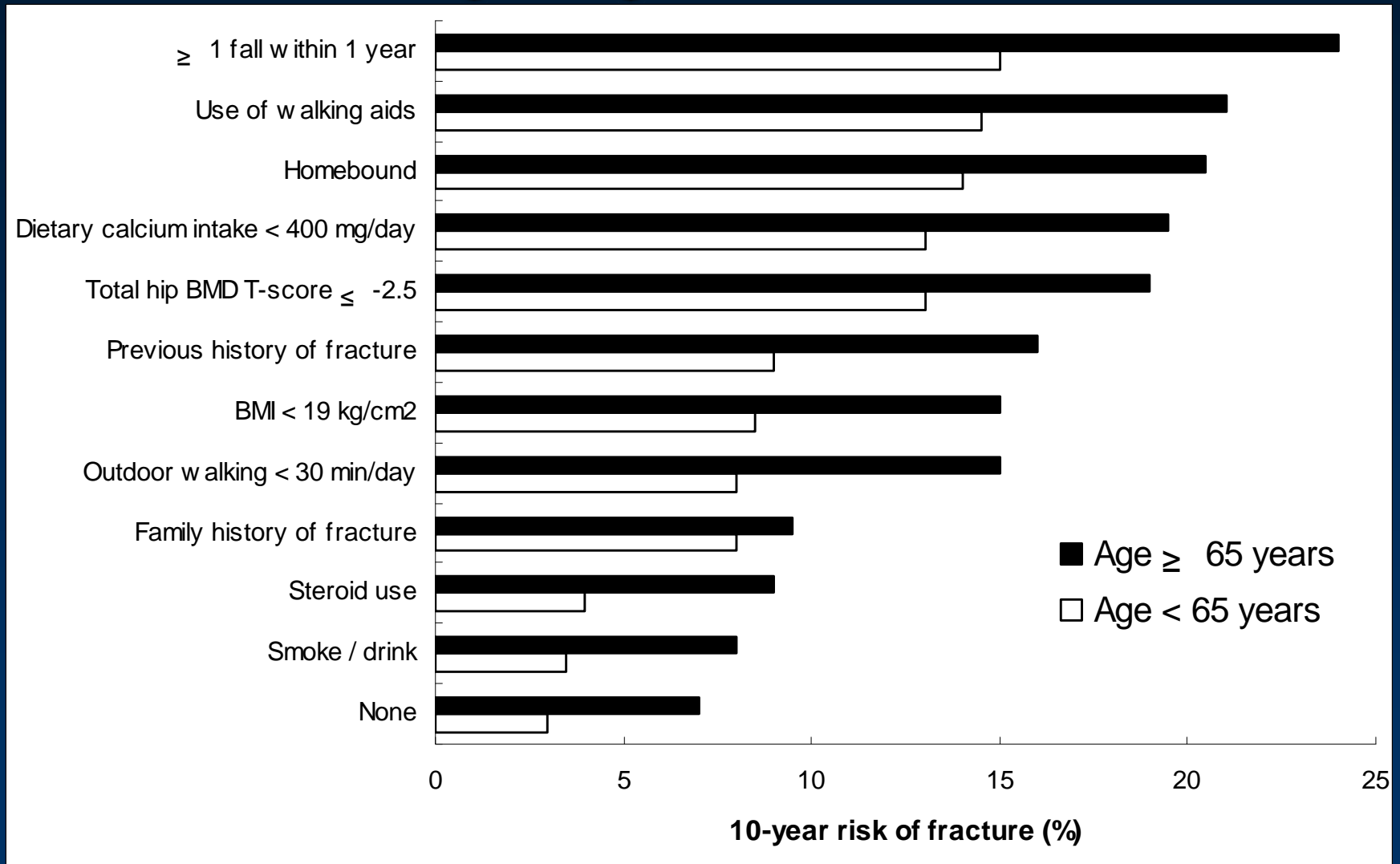
# 10-year Probability of Osteoporotic Fracture (hip, clinical spine, forearm) by BMD T Score and Country



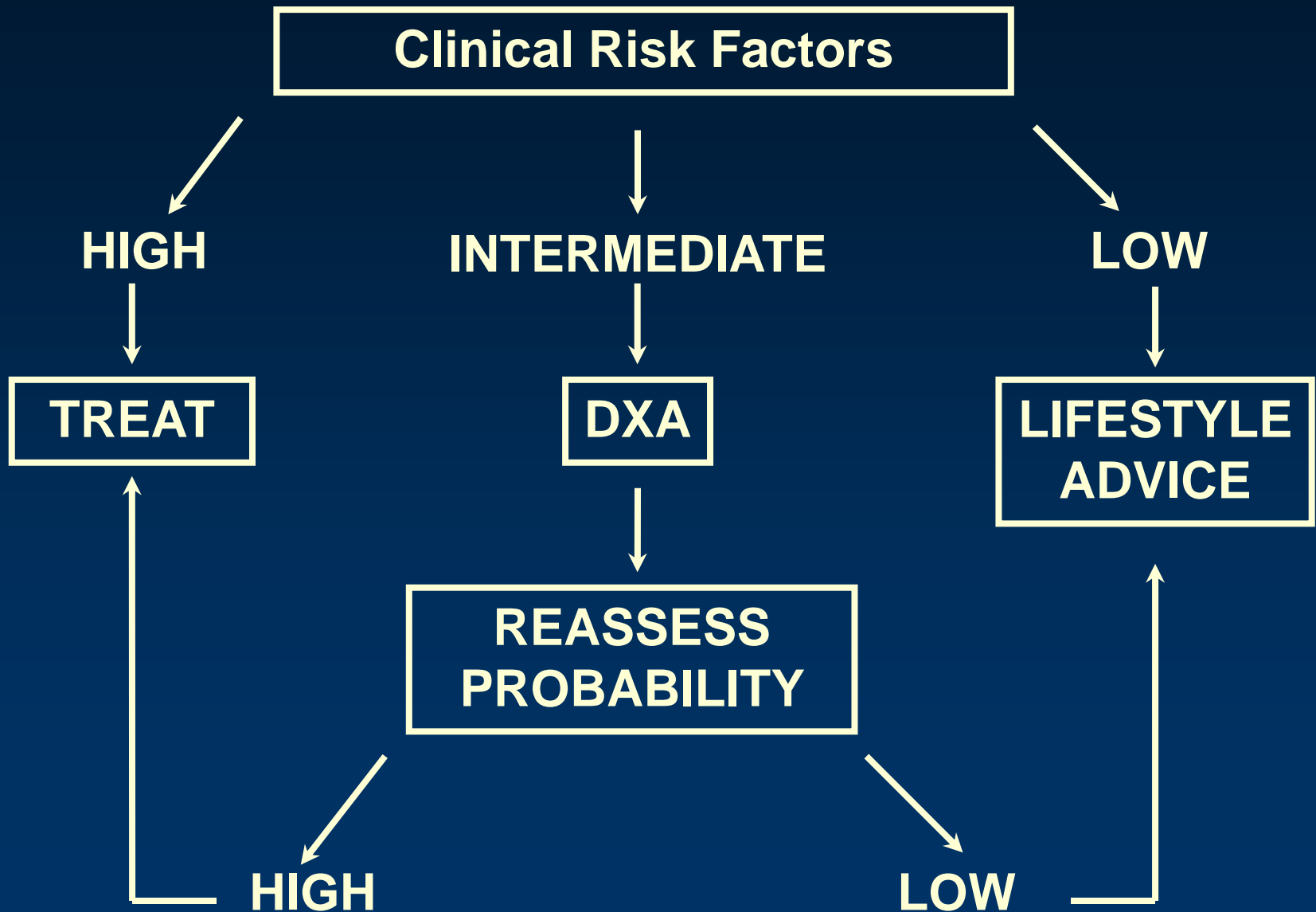
# Availability of Assessment

- **Osteoporosis awareness** of the population in China and Hong Kong is gradually improving in the past decade. Awareness campaign limited to major cities. Central **DXA** limited to hospitals and major clinics in a few large cities.
- **BMD testing: China:** Mostly younger at risk patients and post-fracture ambulatory patients.  
**HK:** Mostly health-conscious low risk women!  
Majority of fractured patients do not receive any measurements nor treatment.

# Interaction of Age with Other Clinical Risk Factors on 10-year Risk of Osteoporotic Fracture in Hong Kong Chinese Women



# Proposed Clinical Algorithm in Hong Kong



# Treatment Availability

- **Medications:** Antiresorptives and bone formers are available. China: limited reimbursement mostly self-financed. Hong Kong: almost all self-financed except steroid-induced osteoporotic fractures.
- **Treatment decision** lies in BMD results and history of fracture.
- **Monitoring** during therapy: depend on individual practice. Mainly by BMD at 1-2 yearly intervals. Bone markers very limited availability.

# Future directions in OP Care

- Well facilitated centres in large cities, increasing interest in both medical and public sectors; growing wealth of epidemiology data; establishment of government and NGO bodies to promote osteoporosis activity
- **Challenges:** huge and growing size of elderly population; limited resources; limited auditing and registry systems to collect patient information
- **Objectives:** maintain the low fracture rate in China!