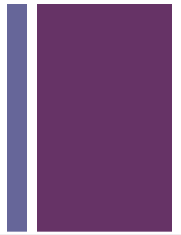




Introduction of new drugs/regimens in Vietnam

DRTB STAT call, April 2017

+ Situation of Drug-resistant TB in Viet Nam



	DRS 3 (06-07)	DRS 4 (11-12)
MDR rate among new TB patients	2.7 % (2.0-3.6%)	4.0 % (2.5 - 5.4%)
MDR rate among retreated patients	19% (14-25%)	23.3% (16.7-29.9)
The number of MDR-TB patients among the number of new TB patients every year	2000 (1500-2700)	3000
The number of MDR-TB patients among the number of retreated patients every year	1700 (1200-2200)	2100
Total number of MDR-TB patients among total number of TB patients every year	3700	5100
XDR-TB/MDR-TB		5.6%
FQ res/MDR-TB		16.7%

+ MDR-TB/pre XDR-TB/XDR-TB

Global TB report (2016)

- 580.000 new cases MDR-TB/RR-TB
- 9,5% among MDR-TB: XDR-TB

Countries that had reported at least one XDR-TB case by end March 2011



Treatment of MDR/preXDR/XDR in Việt Nam:

- Conventional reg. and shorter reg. for MDR-TB
- Estimated 868 cases preXDR/XDR per year → limited treatment options (new drugs are under research)

DRTB in Vietnam:

- Estimated yearly : 5.200 cases MDR-TB/RR-TB
- 16,7% FQs resistance among MDR-TB
- 5,6% XDR-TB among MDR-TB

MDR-TB RESPONSE (PMDT program)

■ Progress:

- 2007: GLC's approval
- 2009: pilot in Ho Chi Minh city
- Until Dec/2016: Total **about 8.500** patients were enrolled,
- Treatment success rate: **more than 70%**
- **101 pts enrolled in shorter regimen (cohort study)**
- **99 pts enrolled in Bedaquiline individualized regimen (cohort study)**

■ Current status:

- PMDT coverage: 63/63 provinces
- PMDT guidelines: updated with recent recommendations
- Training materials available for different target groups.
- Xpert MTB/RIF coverage: 100% provinces
- SLDs LPA: 2 labs → will cover all R+ cases detected in 2017

Rationale for new drugs and regimens in DR-TB treatment

RR/MDR-TB: 5.200 cases among notified; significant number of patients have been enrolled (30%/year).
However:

- ❑ There is no regimen for MDR-TB patients (>850 cases) who:
 - Have failed MDR-TB treatment (7%)
 - XDR-TB patients (5.6%)
 - FQ resistance (16.7%)
 - Intolerance to current second-line drugs

→ **New drugs required**

- ❑ Current regimen (20 months): lost to follow up >10% (long course, AEs → **short course regimens** with effectiveness and safety required)

+ Brief introduction about STR and BDQ cohort study

- **Aim:** To assess the new drug containing regimen and new regimen for
 - **Efficacy** (conversion rate, cured rate)
 - **Safety** (AEs, lost to follow up, regimen changes)
- **Sites:** 3 cities Hanoi, Hochiminh city, Cantho
- **Number of patients recruited:** 100/each study
- **Inclusion criteria:**

BDQ regimen	Shorter regimen
<ul style="list-style-type: none">- Resistance to second line drugs: injectable or/and FQs- Intolerance to existing regimen	Resistance to R, not to second line drugs

New D&T algorithm – patient triage approach

Patients presumed to have TB / patients at high risk for MDR (9 groups)

Xpert MTB/RIF (1-2x)

Rif resistant (RIF+) (or suspected)

No prior SLD use & Not (pre-) XDR contact & No intolerance to SR drugs

Start shorter MDR regimen

Yes to prior use of SLD or Yes to (pre-) XDR contact or Intolerances to SR drugs

Two options: wait for SL LPA results or start MDR treatment while waiting

At same time: all RIF+ receive phenotypic DST + molecular tests for FQ & SLI

confirmed uncomplicated MDR (RIF+ FQ- SLI-)

Standard shorter MDR treatment

MDR (RIF+) + (indication for ND)

Pre-XDR (RIF+ & FQ+ or RIF+ & SLI+)

XDR (RIF+ & FQ+ & SLI+)

Rif susceptible (RIF-)

FLD treatment



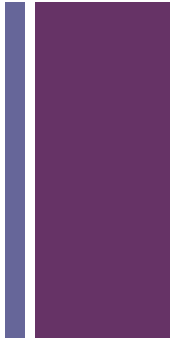
SL LPA testing in Vietnam



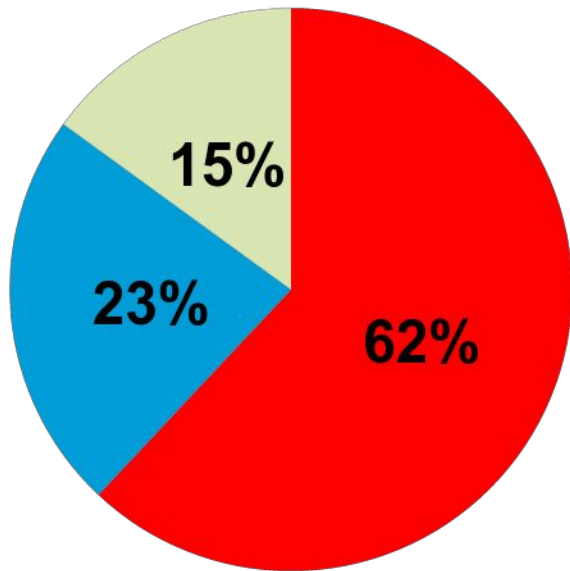
- Started from October 2015 with version 1, currently using version 2
- 2 labs: NRL (Hanoi), PNT lab (Hochiminh city)
- From Oct15 – Dec16: at 3 pilot sites, SL LPA for all RR detected, presumptive preXDR/XDR-TB
- **2016 data:** from 3 sites, 524 cases tested with SL LPA:
 - Res. to FQs = 69
 - Res. to SL injectables = 19
 - Res. to both = 19
 - Total 107
 - Enrolled 85 cases in BDQ treatment
- From 2017: SL LPA for:
 - all RR detected in 19 sites,
 - presumptive preXDR/XDR-TB in all PMDT site

+ STR cohort (1)

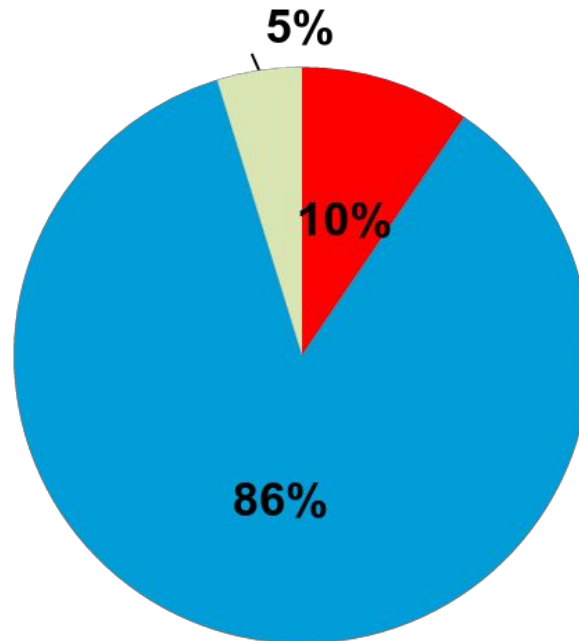
total 101 patients enrolled



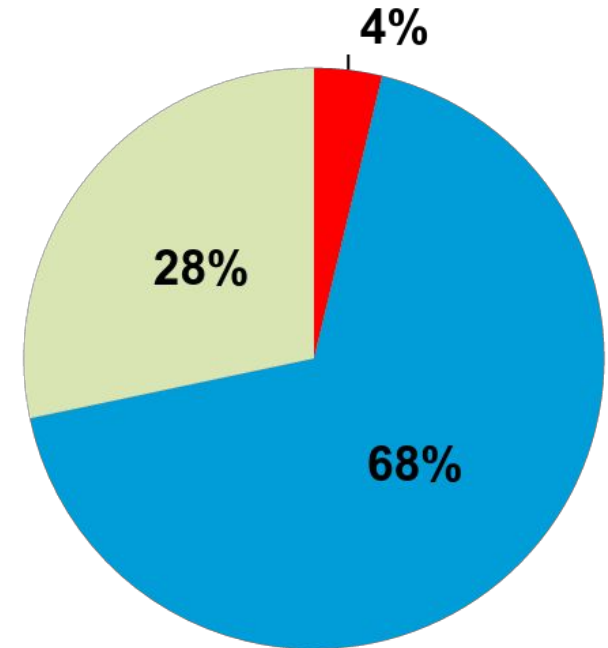
Baseline culture
n = 100



4th month culture
n = 63



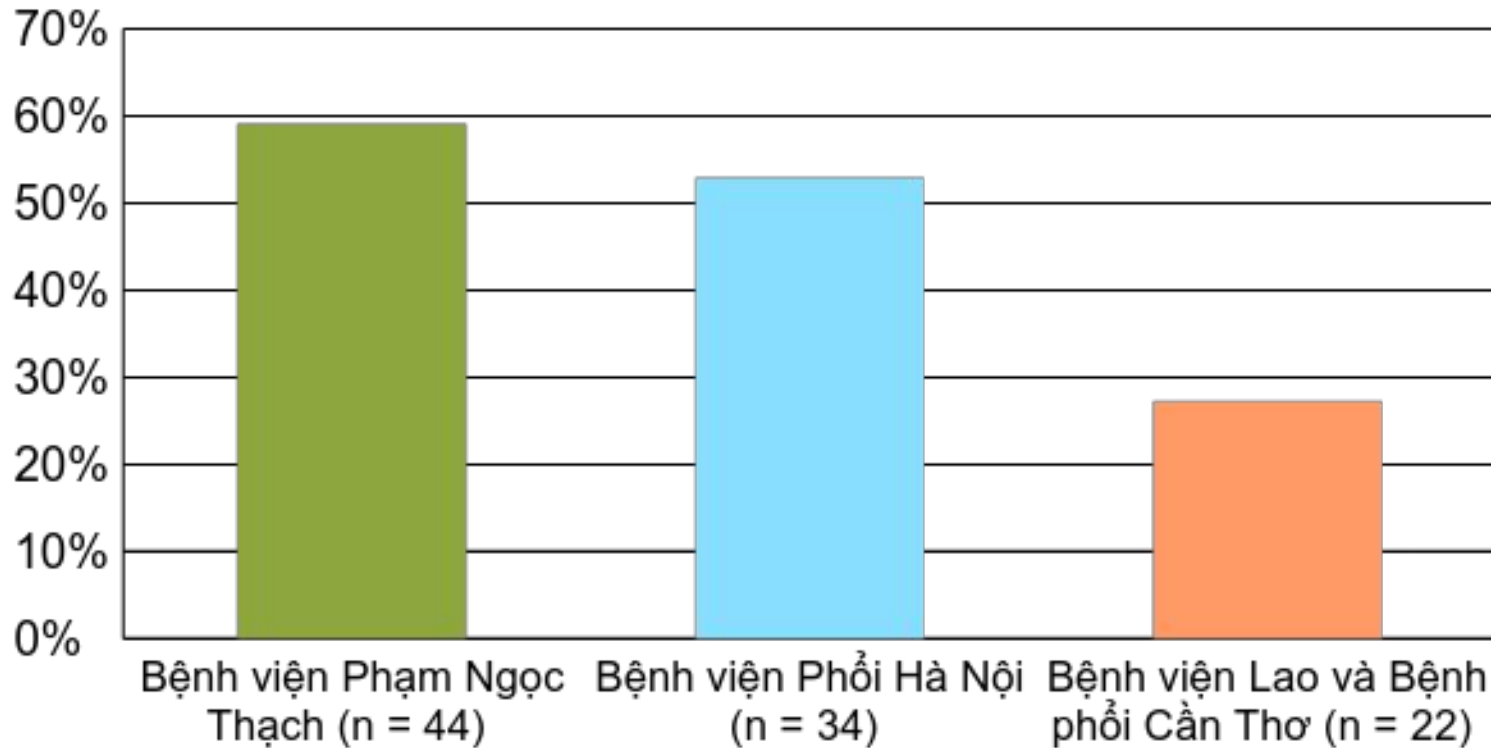
6th month culture
n = 53



-  MTB positive
-  MTB negative
-  Not evaluated/pending results

+ STR cohort (2)

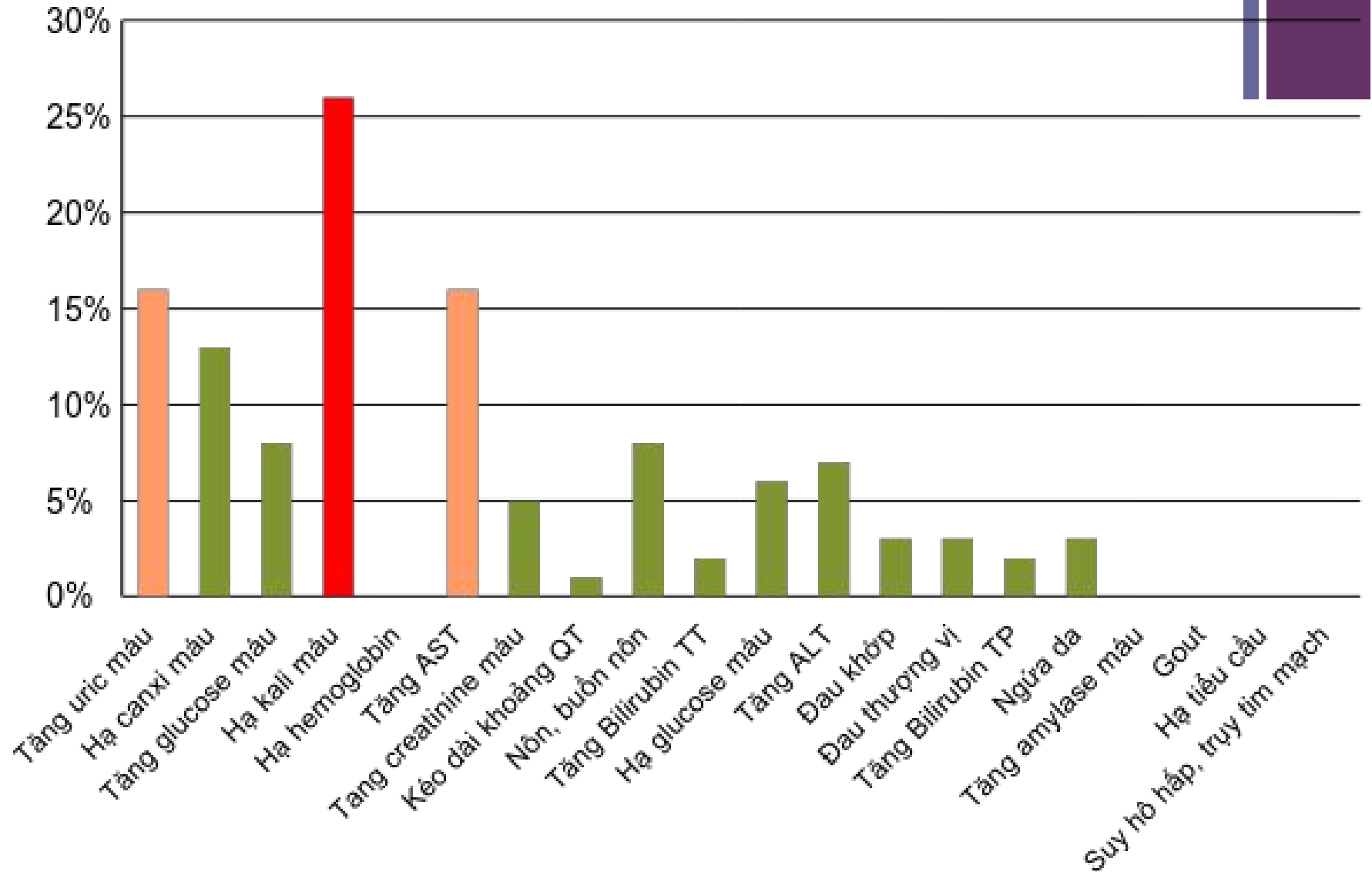
proportion of any AEs



Sites	No of pts with any AEs	Proportion of any AEs
BV Phạm Ngọc Thạch (n = 44)	26	59,09%
BV Phổi Hà Nội (n = 34)	18	52,94%
BV Lao và Bệnh phổi Cần Thơ (n = 22)	6	27,27%
n = 100	50	50%

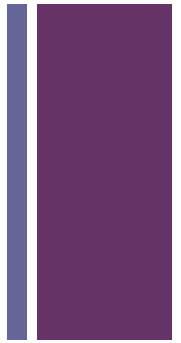
+ STR cohort (3)

Proportion of different AEs

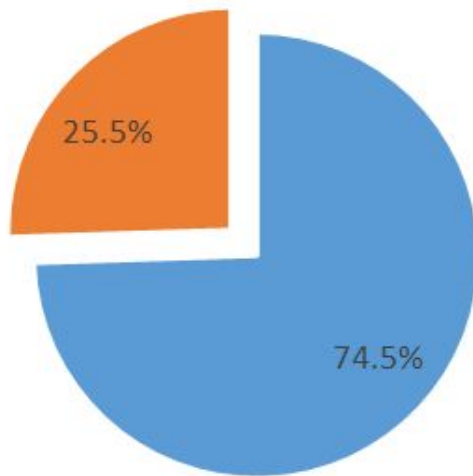


+ BDQ cohort (1)

Dec15 - Mar17, total = 99 patients

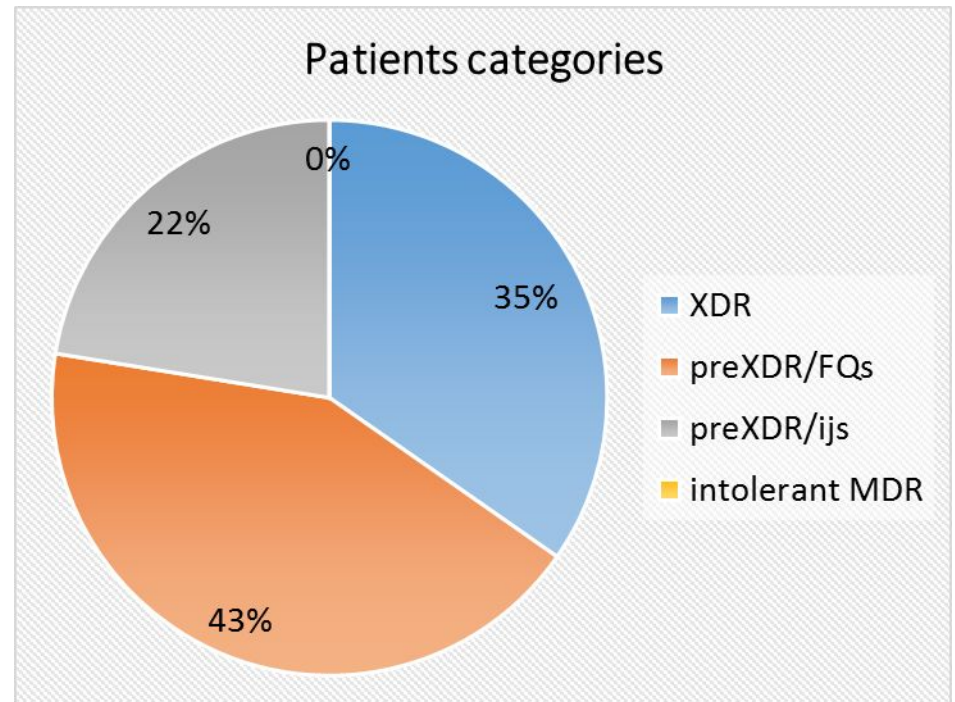


Male/female ratio



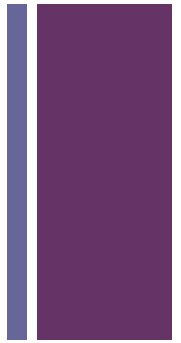
■ Male ■ Female

Patients categories



+ BDQ cohort (2)

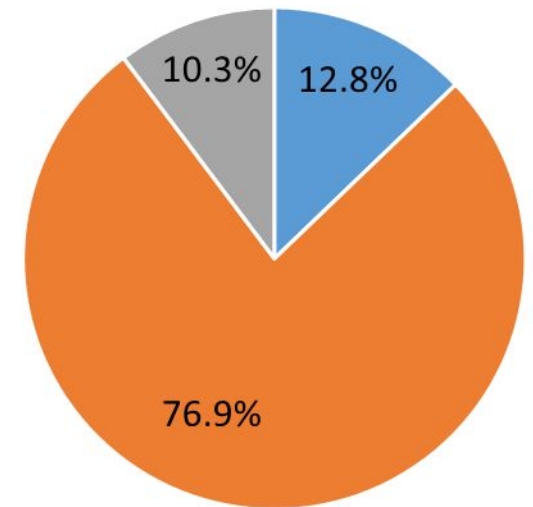
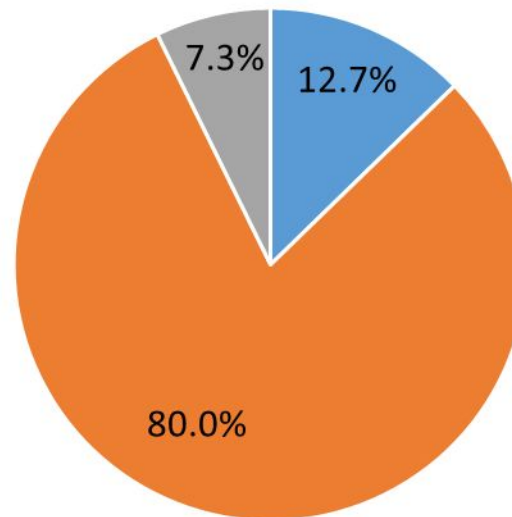
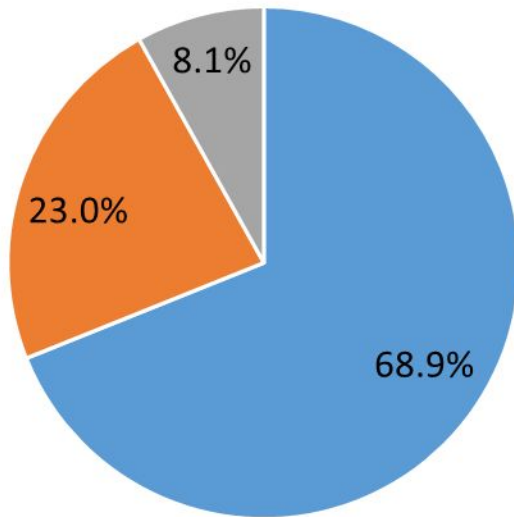
sputum culture conversion






Baseline culture
n=74

Sputum culture after 3 months
n=55

Sputum culture after 6 months
n=39



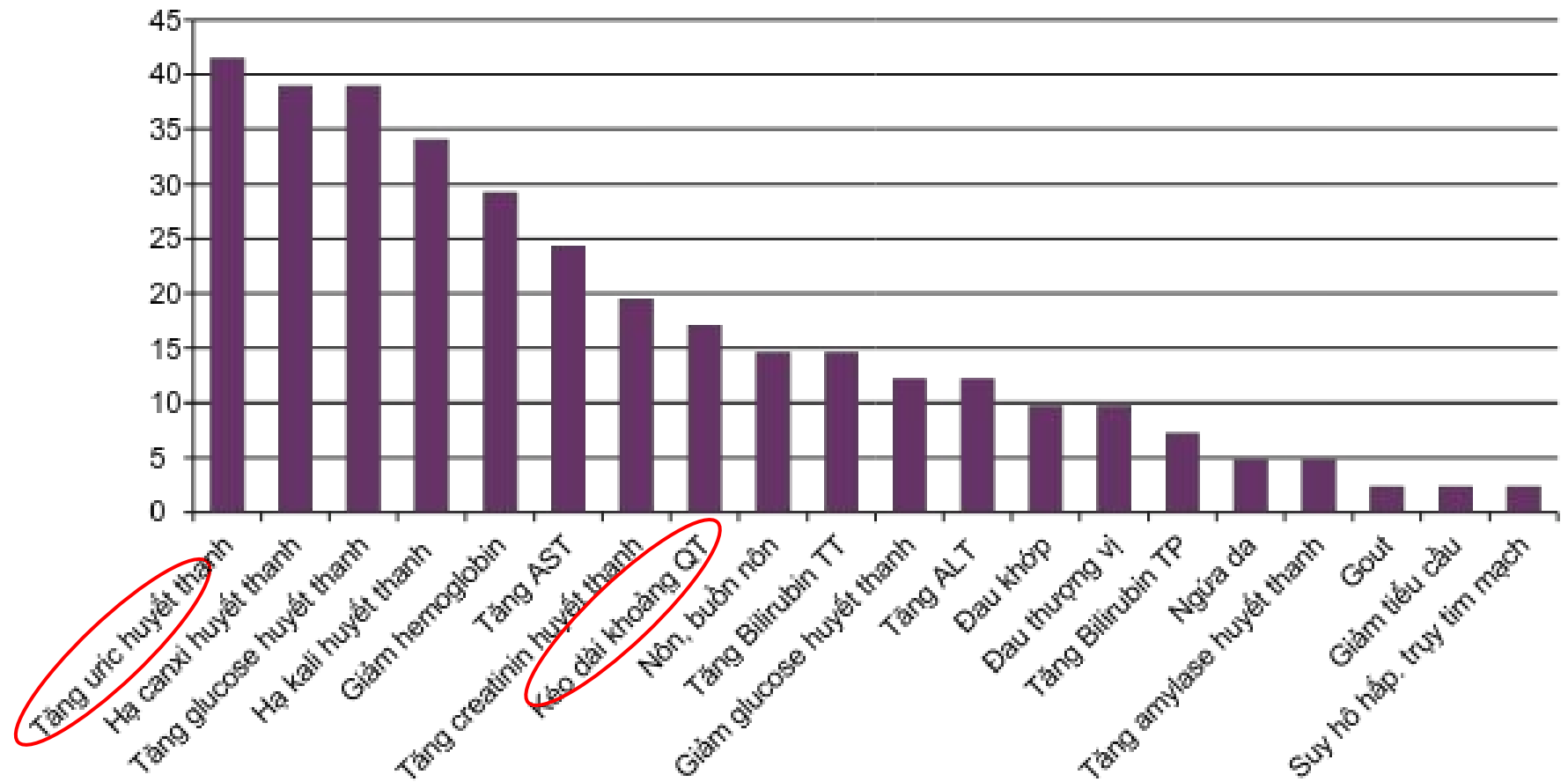
-  MTB positive
-  MTB negative
-  Not evaluated

+ BDQ cohort (3)

Initial results of safety

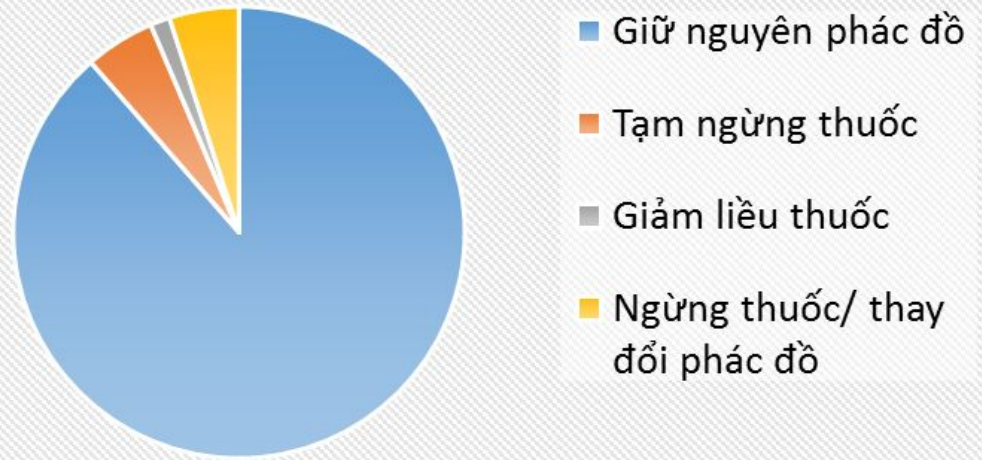
N = 41 patients (evaluation after 6 months)

Proportion of different Adverse Events

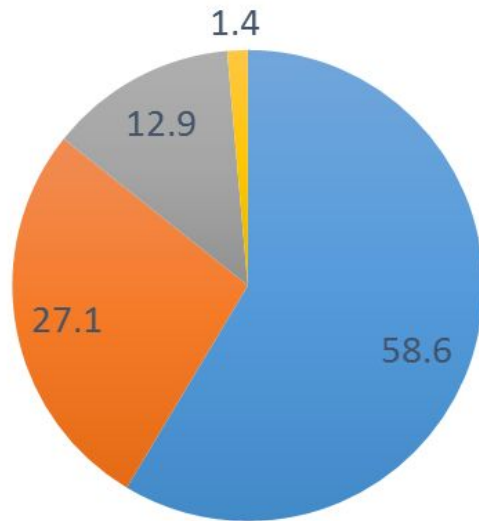


+ BDQ cohort (4)
Initial results of safety
N=41

Ảnh hưởng đến phác đồ điều trị



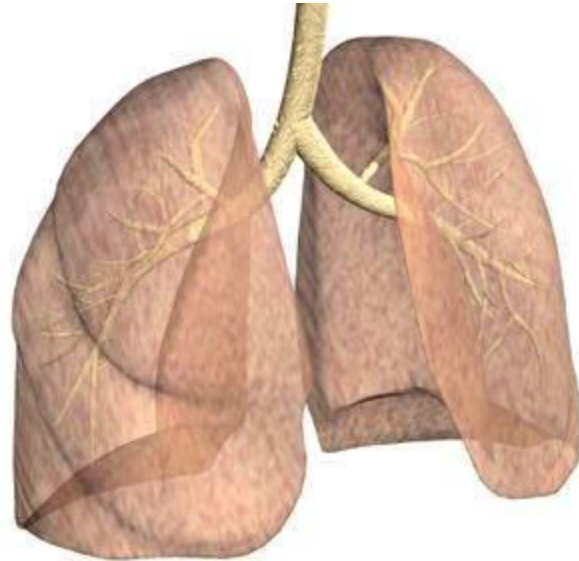
Mức độ nặng của biến cố bất lợi



11,4% changed treatment regimen (treatment interruption/ dose adjustment/ stop treatment)

■ Mức độ 1 ■ Mức độ 2 ■ Mức độ 3 ■ Mức độ 4

THANK YOU VERY MUCH



For your attention!