

# Lung Cancer

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# Overview

- 1 Introduction
- 2 Materials
- 3 Methods
- 4 Results
- 5 Proceedings

# Introduction

# Materials

- WES + WTS
- Normal + {Primary, CIS AIS, AAH, Dysplasia, MIA}

## Methods

# Somatic short variant discovery

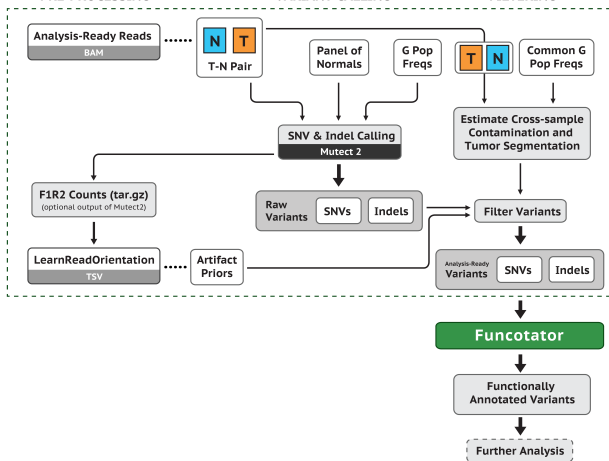
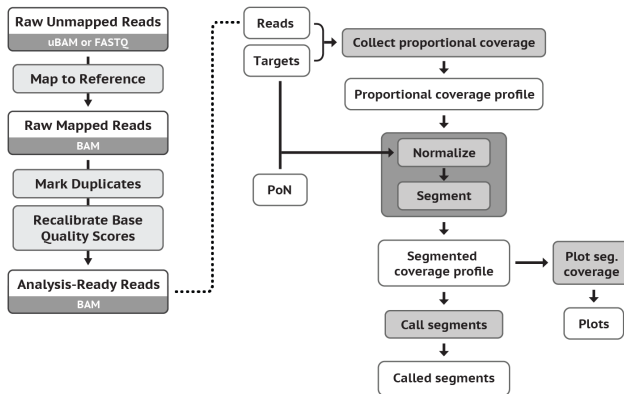


Figure: Somatic short variant (SNVs + Indels) discovery workflow (Van der Auwera et al., 2013)

# Somatic CNV discovery



**Figure:** Somatic CNV (copy number variant) discovery workflow (Van der Auwera et al., 2013)



## Results

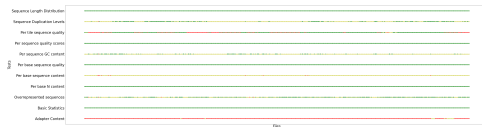


Figure: FastQC with WES data

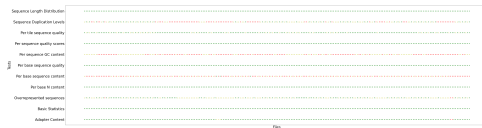


Figure: FastQC with WTS data

∴ All PASS at *per base sequence quality*!

# Proceedings

Van der Auwera, G. A., Carneiro, M. O., Hartl, C., Poplin, R., Del Angel, G., Levy-Moonshine, A., ... others (2013). From fastq data to high-confidence variant calls: the genome analysis toolkit best practices pipeline. *Current protocols in bioinformatics*, 43(1), 11–10.