# Treatment of Non-Hodgkin's Lymphoma: State of the Art and Home *Brewed* Approaches

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Grant/Research Support: Celgene, Novartis, Takeda Speakers Bureau: Celgene, Amgen, Seattle Genetics

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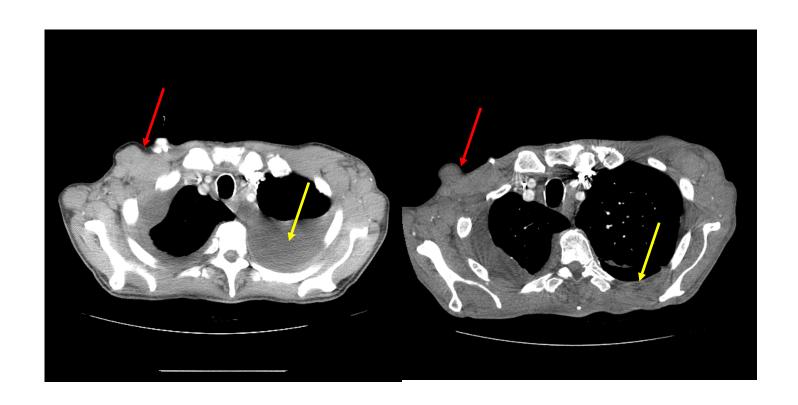




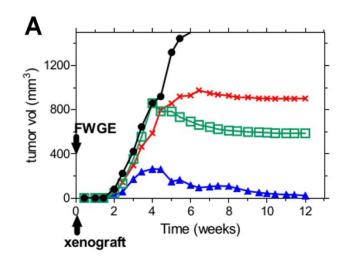
## An Enlightening Case

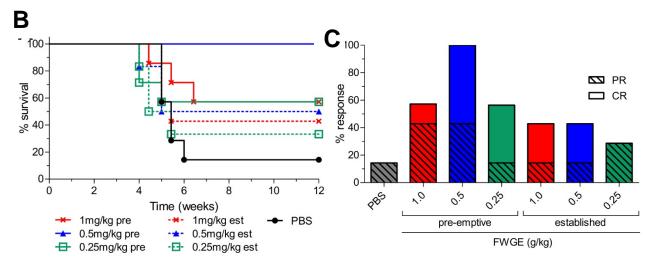
- ND, a 77 y/o male with Stage IV mantle cell lymphoma
  - extensive bulky disease in nearly all nodal stations
  - adamantly opposed to chemotherapy
  - over a 2-3yr period had tried a number of alternative treatment approaches.
- presented to consultation
  - bilateral pleural effusions
  - left chest wall mass
  - bulky inguinal adenopathy
  - dyspneic and appeared cachectic
- continued to refuse chemotherapy and insisted on initiating therapy with fermented wheat germ extract (also known as MSC).

# Follow-up of ND

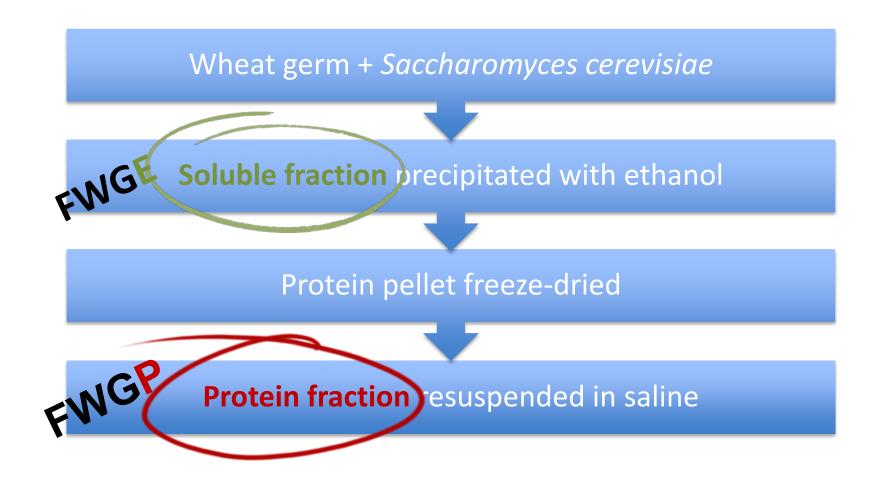


# FWGE Pre-clinical Efficacy in Burkit's Xenograft Model





#### In-house Production of Fermented Wheat Germ



### Table 1: IC<sub>50s</sub> for FWGP

Cell line	Human tumor	IC <sub>50</sub> (μg/ml)
HCT-15	Colon	12
SNU-16	Gastric	12
DG-75	Burkitt's lymphoma	20
HCT-116	Colon	23
DLD-11	Colon	27
Raji	NHL	39
Chevalier	NHL	40
WSU-WM	NHL/Waldenstrom	42
Ramos	NHL	70
Sudhl4	NHL	70
A549	Lung	70
BM35	NHL	71
Granta519	NHL	80
H1650	Lung	144
DoHH2	NHL	171
HepG2	Hepatic	245
MCF-7	Breast	639

## FWGP In vivo efficacy

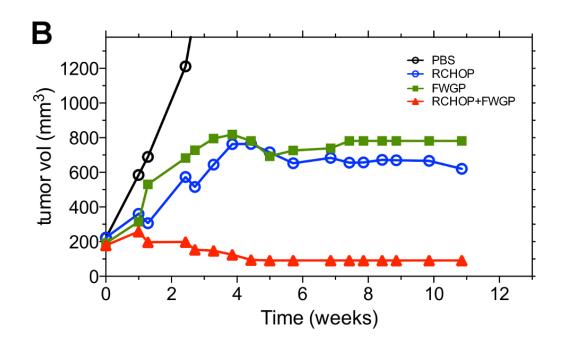


Figure 4: NK cell depletion abrogates FWGP activity in vivo

