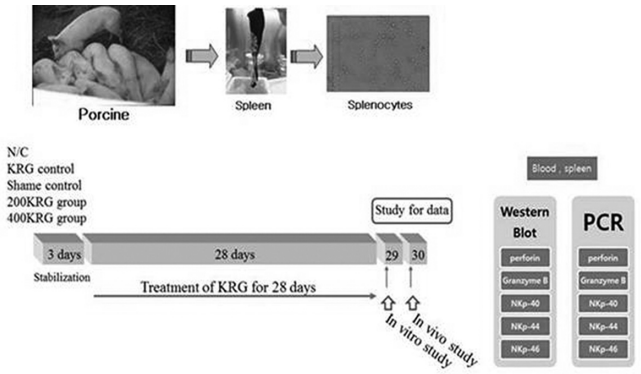

Abstract 43 Figure 1

splenocytes (effector) were incubated with K-562 (target) in a ratio of 100:1 for 4 hour once a week until the end of the experiment.

Conclusions The splenocytes from KRG treated porcine showed a significantly increased cytotoxicity in time dependent fashion. Whereas, splenocytes from untreated porcine showed a less toxicity. Taken together, KRG has the potential to modulate immune function and should be further investigated as an immunomodulatory agent.

44 GASTRIC CANCER CELL MICRO ENVIRONMENT MODULATES THE NK CELL EFFICACY IN RAT SPLENOCYTES

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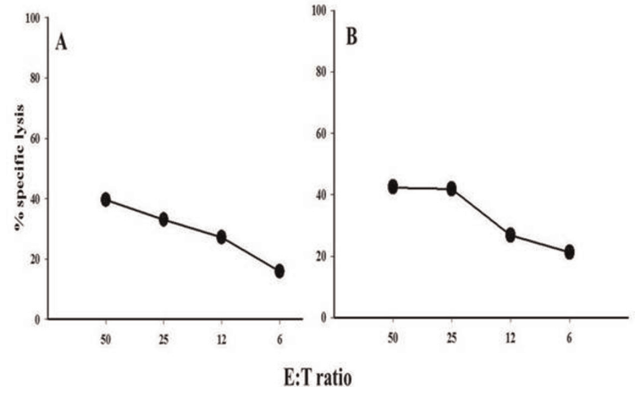
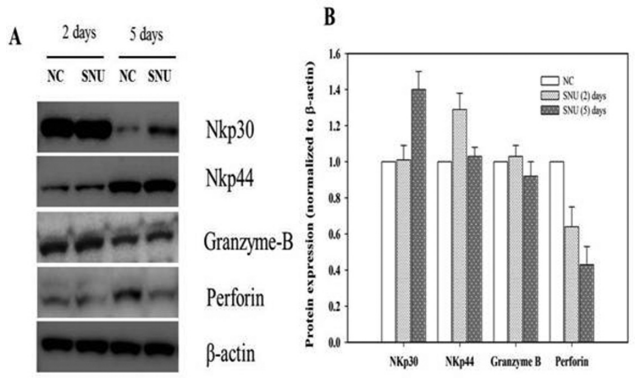
10.1136/lupus-2017-000215.44

Background and aims Natural killer (NK) cells are specialised lymphocytes capable of counteracting pathogens (bacteria, viruses) as well as cancer cells. Unlike T lymphocytes, NK cells do not require antigen-specific recognition to act on target cells. The activation of NK cell requires the action of certain pro-inflammatory cytokines (IL-2, IL-12, IL-18, IL-21).



Abstract 44 Figure 1 Cytolytic activity of splenocytes against K562 cells at 24 h with various effect to target (E:T) ratio. (A), untreated splenocytes; (B), splenocytes were treated with 1% (v/v) SNU 484 supernatant for 1 day prior to the experiment,



Abstract 44 Figure 2 (A) Western blot analysis of 1% SNU 484 cell supernatant treated splenocytes for NK cell markers; (B), Normalized expression of various NK cell makers compared to β-action.

Methods Gastric cancer cells (SNU-484) were grown in RPMI medium with 10% heat inactivated FBS at a seeding density $1*10^6$ cells/mL for 3 days, supernatant was concentrated 10 fold. Splenocytes were treated with 1% (v/v) SNU-484 supernatant for various periods of time.

Results Flow cytometry (FCM) results suggests that the treatment do not affect the viability of the cells during the study period, further the intracellular levels of NKP30, NKP44, granzyme B, perforin were assessed using Real time-PCR (RT-PCR) and western blot techniques. RT-PCR revealed that NK cell markers were initially down-regulated during 2 days of incubation and increased several folds higher during 5^{th} day when compared to normal control. However, no significant changes were observed in protein expression. SNU-484 cells supernatant treated splenocytes were further analysed for cytolytic activity against K562 cell line as a target with varying (1:6, 1:12, 1:25 and 1:50) target to effector ratio for a period of 24 hour.

Conclusions The results suggest that the treated splenocytes have significantly increased cytolytic activity (49.4%) at the lower effector to target ratio (1:25) when compared to untreated control splenocytes (38.2%). Our results indicate that gastric cancer cell micro-environment can modulate the NK cells efficacy to act against cancer.

45 INDUCTION OF DIFFERENTIATION OF REGULATORY T CELLS COUPLED TO ENDOPLASMIC RETICULUM STRESS IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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10.1136/lupus-2017-000215.45

Background and aims The aim of this study was to investigate the proportion of regulatory T cells (Tregs) in the peripheral blood mononuclear cells (PBMCs) of patients with systemic lupus erythematosus (SLE) compared with that of healthy controls (HCs). We also evaluated the differentiation difference of induced Tregs in vitro under the presence or absence of endoplasmic reticulum (ER) stress, which is one of the causal factors triggering lupus flares.

Methods We isolated the PBMCs of 16 SLE patients and 11 HCs. The percentage of $CD4^+CD25^+FoxP3^+$ Tregs was