SUMMARY

Chapter 1 presents the general introduction of this thesis. First, this chapter explains the importance of meaning-making in cancer survivors’ well-being, subsequently it provides a brief general overview of theoretical perspectives on meaning. Subsequently, the chapter elaborates further on the search for meaning in cancer patients, which Lee calls the “existential plight of cancer”. Furthermore, the Meaning Making Model is described, explaining meaning-making processes, and the possible search for meaning, in response to adverse events. In this process, a discrepancy can occur between one's global and situational meaning, which, according to the model, leads to distress. In addition, specific attention is paid to the role of meaning in survivorship, describing that meaning is strongly related to successful adjustment and better quality of life up even years after cancer diagnosis. Moreover, this chapter gives an overview of meaning-focused therapies. Most of these interventions focus on advanced cancer patients and show promising, but inconclusive results. Furthermore, the content, design, and previous evaluations of meaning-centered group therapy, which was initially developed to enhance or sustain a sense of meaning in advanced cancer patients, are described. In addition, this chapter presents the aim of this thesis: to obtain insight in meaning-making processes in cancer survivors, adapt meaning-centered group psychotherapy for a cancer survivor population, and evaluate the efficacy and cost-utility of the adapted intervention, called “meaning-centered group psychotherapy for cancer survivors” (MCGP-CS). Finally, this chapter provides an outline of this thesis.

Chapter 2 includes the outcomes of a focus group study on meaning-making processes in cancer survivors. Four focus groups were conducted with 23 cancer survivors (< five years after their respective diagnosis), who were treated with curative intent. Participants responded to questions about experienced meaning-making, perceived changes in meaning-making after cancer, and the perceived need for help in this area. We found that most frequently mentioned meaning-making themes were relationships and experiences. In general, cancer survivors experienced enhanced meaning after cancer through relationships, experiences, resilience, goal-orientation and leaving a legacy. Some participants however also said to have (also) experienced a loss of meaning in their lives through experiences, social roles, relationships and uncertainties about the future. The results of this study indicated that there is a group of cancer survivors that has succeeded in meaning-making efforts, and sometimes even experienced more meaning in their lives than before the diagnosis, while there is also a considerable group of survivors that struggled with meaning-making and has an unmet need for help with that.

Chapter 3 describes a feasibility study on meaning-centered group psychotherapy for cancer survivors (MCGP-CS). Based on the focus group study presented in Chapter 2 and on expert input, the MCGP manual was adjusted for a Dutch cancer survivor population (MCGP-CS). We performed the adjusted MCGP-CS twice, a total 11 cancer survivors participated. The recruitment strategy was tested, improvements among participants after
intervention were measured, and client satisfaction was evaluated. The results showed good acceptability, compliance and client satisfaction, and gave valuable information for improving the recruitment strategy. The results were encouraging to start a randomized controlled trial (RCT).

Chapter 4 includes a rationale and description of the study protocol of our RCT. Meaning-focused coping is key to adjustment to life after cancer, however, there is a lack of evidence based psychological interventions in this area. The aim of the proposed study was to evaluate the effectiveness and cost-effectiveness of MCGP-CS. Survivors diagnosed with cancer in the last five years and treated with curative intent were recruited via several hospitals in the Netherlands. After screening, it was planned to randomly assign 168 survivors to one of the three study arms: 1. Meaning-centered group psychotherapy (MCGP-CS) 2. Supportive group psychotherapy (SGP) 3. Care as usual (CAU). A baseline assessment was scheduled before randomization, with follow-up assessments post-intervention and after three, six and twelve months respectively. The primary outcome was meaning-making (PMP, PTGI, SPWB). The secondary outcome measures address quality of life (EORTC-30), anxiety and depression (HADS), hopelessness (BHS), optimism (LOT-R), adjustment to cancer (MAC), and costs (TIC-P, EQ-5D, PRODISQ). Because many cancer survivors experience feelings of loneliness and alienation and have a need for peer support, a group method can be particularly beneficial for sustaining or enhancing a sense of meaning. If this MCGP-CS is effective for cancer survivors, it can be implemented in the practice of psychosocial oncology care.

Chapter 5 examines the efficacy of MCGP-CS, in the RCT as described in Chapter 4. A total of 170 cancer survivors were randomly assigned to one of the three study arms: MCGP-CS (n = 57), SGP (n = 56), CAU (n = 57). The primary outcome was the Personal Meaning Profile (PMP). Secondary outcomes were the subscales of PMP, Scales of Psychological Well-Being (SPWB), Posttraumatic Growth Inventory (PTGI), Mental Adjustment to Cancer Scale (MAC), Life Orientation Test-Revised (LOT-R), Beck’s Hopelessness Scale (BHS), Hospital Anxiety and Depression Scale (HADS), and quality of life (EORTC QLQ-C30). Outcome measures were assessed before randomization, post-intervention, and after three and six months follow-up (FU). Linear mixed model analyses (intention-to-treat) showed significant differences on the course of the PMP, subscales of the SPWB and MAC, and the HADS, between MCGP-CS, SGP and CAU. Post-hoc analyses showed significantly stronger treatment effects of MCGP-CS compared to CAU on personal meaning (d=0.81), positive relations (d=0.59), purpose in life (d=0.69), goal-orientedness (d=1.07), and fighting spirit (d=0.61) (post-intervention), helpless/hopeless (d=0.87) (three months FU), and distress (d=-0.6) and depression (d=-0.38) (six months FU). Significantly stronger effects of MCGP-CS compared to SGP were found on personal growth (d=0.57) (three months FU), and environmental mastery (d=0.66) (six months FU). This chapter concludes that MCGP-CS is an effective intervention for cancer survivors to improve meaning in the short term. Also, there are indications for improvements on psychological well-being, and mental adjustment to cancer and to reduced psychological distress in the longer-term.
Chapter 6 reports on the results of a cost-utility analysis of MCGP-CS, compared to SGP and CAU, within the context of the randomized controlled trial, as described in Chapter 4 and 5. Intervention costs, direct medical and non-medical costs, productivity losses and health related quality of life were measured until six months follow-up, using the TIC-P, PRODISQ data from the hospital information system, and the EQ-5D. The cost-utility was calculated by comparing mean cumulative costs and quality adjusted life years (QALYs) of MCGP-CS, SGP, and CAU.

After imputation of missing data, there were no significant differences in mean cumulative costs and mean number of QALYs between the three groups. A probabilistic approach was applied. MCGP-CS had a probability of 74% to be less costly and more effective than CAU, and 49% compared to SGP. Additional analyses assessing the robustness of these findings, showed that compared to CAU, MCGP-CS had a probability of 54-74% to be less costly and more effective. The probability that MCGP-CS is less costly and more effective compared to SGP was 48-55%. Comparing SGP to CAU, the probability that SGP is less costly and more effective was 22-49%. If society is willing to pay €0 for one gained QALY, MCGP-CS has a 78% probability of being cost-effective; this increases to 85% at €10,000 and to 92% at €30,000. This chapter concludes that MCGP-CS is likely to be more effective and less costly than CAU, while it is probably more effective and equally expensive compared to SGP.

Chapter 7 provides a general discussion, summarizing the main findings, limitations, and implications of the studies in this thesis. This thesis confirms the findings in previous studies that the experience of meaning can change after cancer, and adds to the growing evidence of beneficial effects of meaning-centered group psychotherapy (MCGP) for cancer patients, giving support for the efficacy of MCGP for a cancer survivor population. The economic evaluation shows that MCGP-CS is likely to be more cost-effective than care as usual (CAU), and more effective than SGP, but not less costly. Furthermore, this chapter elaborates on the role of peer support, suggesting this might be an important element in this meaning-centered psychotherapy. The main study limitations concern the use of outcome measures with no clear cut-off scores, and the relatively low levels of distress in this study population. Also, this section points out that the results of the cost-utility analysis should be interpreted with caution, as statistical significance was not reached; however, a probabilistic approach could be applied. Furthermore, this chapter provides clinical implications, recommending that MCGP-CS should be implemented in clinical settings, as the results of this thesis show that it is feasible and acceptable for patients as well as for health care providers. Recommendations for future research include further investigation of moderators and mediators of the effects, and research and application of MCP for different target groups (e.g. with higher levels of distress, individual therapy, caregivers). In conclusion, this thesis showed that MCGP-CS is a beneficial addition to psycho-oncology health care, improves meaning and psychological well-being of cancer survivors, and is likely to ensure good value for money.